Economic Impact Assessment of the Katimavik Program

Phase 1

Final Report

Katimavik

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ECONOSULT

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EXECUTIVE SUMMARY

- The major objective pursued in this study, was to evaluate the economic impacts of the Katimavik program over the last four years. Since the participants in this program are all volunteers, the approach used in this study, was to estimate the working value of the work performed.

  The working value of the Katimavik projects was evaluated at $ 58,7 millions, for the last four years. From that amount, $ 33,2 millions could be attributed to wages which could have been paid to Katimavik participants, and $ 25,5 millions, to the costs of material and equipment paid by the sponsors.

- The first activity in this study was to classify the work executed by the Katimavik participants over the last four years. This classification into work categories was accomplished by the Katimavik study team.

- The second activity in this study, consisted in assigning to these working categories, occupations from the labour market. (This part and all of the parts following, were the responsibility of the Econosult study team).

- The wages corresponding to the occupations determined in the last activity came from three sources;

  1) a survey from Labour Canada entitle "Wages rates, salaries and hours of labour".

  2) telephone interviews with representatives from the public and private sectors, mainly executed in Toronto and Montreal.

  3) the provincial laws concerning the minimum wages.

- In the fourth task, three scenarios giving the range of the wages for one occupation were developed:

  1) the high scenario corresponding to the average wages taken from the Labour Canada survey.

  2) the median scenario representing the basic wage for the various occupations.

  3) the low scenario corresponding to the minimum wage effective in the regions where Katimavik participants are affected.

- The average level of wage rates by category and region were then established for the three scenarios. Before obtaining average wage levels, the wages were

  1) raised up by the inflation factor, in the case of the high scenario, because the wages taken from the survey of Labour Canada were dated from the end of 1982.

  2) averaged, in the case of the median scenario, between those rates for males and females

  Finally for all scenarios, an average of 37.5 hours worked was considered when the wages were available only on an hourly basis.

- The sixth task consisted in choosing a proper scenario for all of the work categories, in order to obtain the value of labour executed by the Katimavik participants. This value calculated by category and region comes from the multiplication of the working weeks executed by participants per category, and their corresponding wage rates. The total cost to the sponsor in materials and equipment is then calculated by category and region.

- The summation per region of those two last variables corresponds to the assessment of the value of the work executed by the Katimavik participants.

The results, as indicated earlier, add to $ 58,7 millions; $ 33,2 millions in potential wages and $ 25,5 millions in materials and equipment.

Finally, the projects' total value in dollars, increased relatively strongly over the last four years. Yet, the most noticeable increase was identified between year 6 and 7. In that particular period, the projects total value went from $ 8 616 006 to $ 21 956 551. This strong increase is due to the large number of working weeks registered in year 7.

1.0 INTRODUCTION

1.1 THE KATIMAVIK PROGRAM

Katimavik is a national youth volunteer program operated by OPCAN, a non-profit private corporation which is subsidized by the Secretary of State of Canada.

Founded in the spring of 1977, Katimavik was designed to provide Canadian youth with the opportunity for personal growth, by carrying out volunteer work as part of a program intended to benefit society at large.

The program has four fundamental objectives:

- To encourage the development of Canadian youth;
- To provide services to various Canadian communities;
- To emphasize sensitivity to environmental concerns;
- To enable Canadian youth to discover and deepen their knowledge of their country.

Each Katimavik project carried out is the result of combined efforts by Katimavik and the project sponsor. Katimavik provides the necessary manpower and assumes the cost of related expenses, that is return transportation for participants to and from the project community, room and board, as well as personal expenses. The project sponsor takes responsibility for providing material, tools and specialists.

As a final consideration, the project must be non-profit in nature and must not reduce employment in the region.

1.2 STUDY MANDATE AND OBJECTIVES

The goal of this study is to assess the economic impact of the Katimavik program over the last four years. As this program is volunteer in nature, a methodology had to be developed which enabled the value of the work performed to be assessed.

In view of the allotted schedule, it was decided that it would be more advantageous to divide the study into two phases: the first involved assessing the "inputs" into the Katimavik program; and the second, assessing the program "outputs". The "inputs" assessment should provide a measure of the program's economic impact.

This report describes the methodology used and the results obtained during Phase I of the project.

2.0 METHODOLOGY

2.1 INTRODUCTION

The economic impact of the Katimavik program was first assessed in terms of the input into the individual projects. This approach consisted in estimating the contribution made to the local communities based on the value of the services performed (i.e. the value of the work and the value of the materials and equipment supplied). In this way, it was possible to determine what society received directly in a very tangible way. This approach, however, does not take into consideration the economic impact on the suppliers of equipment and services used to carry out the projects.

Since the Katimavik projects were for the most part composed of volunteers and materials, the value of the finished work had to be assessed and then the cost of materials added, in order to determine the total value of the inputs to the program.

The data was collected using the tenders submitted by the sponsors, and the following variables were considered:

- the year of the project;
- the region;
- the type of work performed;
- the number of person-weeks;
- the cost of materials and equipment.

More than 2 000 tenders were assessed, which corresponds to the number of tenders accepted in the past four years.

We believed it would not have been appropriate to use a sampling of the tenders submitted by the sponsors. Given that the results of the study were to be presented according to work categories and regions, an assessment based on a sample of the tenders submitted would not have been statistically accurate.

Most of our effort initially went into assigning an adequate wage to those who participated in the program. The type of work performed and in certain cases the minimum wage in effect in the province in question were the criteria used to determine the wage rate.

The following steps were taken in carrying out the study:

- classifying the tasks performed;
- setting wage rates for the activities;
- limiting the various wage rates set.

These steps are described in the following pages.

Various wages were then assigned to the participants in each job category in order to determine the value of the work performed by the participants in the Katimavik program. The other part of the project value was calculated in terms of the cost of the materials and equipment used in each project in the main Canadian regions.

2.2 JOB CLASSIFICATION

At the beginning of the study, the Katimavik project managers submitted to the Econosult team a list of the various tasks performed by the volunteers on the Katimavik projects. These tasks fell into the following general categories:

1) construction work/building;
2) social service activities - non-physical work;
3) parks, recreation and civic development
4) silviculture;
5) archeological work;
6) miscellaneous work.

Each of these general categories was broken down into sub-categories in order to clarify the various jobs performed by the Katimavik workers.

The next step was to assign job titles to the various tasks performed by these workers. Table 2.1 below shows the work categories and sub-categories used to classify the sponsor applications and the corresponding job titles to which wage rates were assigned.

As indicated in Table 2.1, several job descriptions in the different categories correspond to the same type of work. For example, labourers can be found in several categories, in residential construction, in parks, recreation and civic development and in silviculture. This is due to the fact that labourers are non-skilled workers who are generally assigned to maintenance type work or general work which require no formal training.

TABLE 2.1 (Page 1 of 3)

OCCUPATION BY MAJOR WORK CATEGORY

MAJOR WORK CATEGORY	SUB-CATEGORY	OCCUPATION
1.0 CONSTRUCTION WORK	1.1 Building	. labourer . janitor or maintenance employee
	1.2 Renovations	
	1.3 General light building maintenance and repairs	
	1.4 Energy conservation work	
2.0 SOCIAL SERVICE ACTIVITIES- NON PHYSICAL WORK	2.1 General hospital work	. hospital helper . work with the handicapped . assistant cook (hospital) . responsible for recreative activities (hospital, home for elderly) . messenger . receptionnist . office clerk . library technician . daycare work . labourer (hospital institution)
	2.2 General work with the elderly, the handicapped and the disadvantaged	
	2.3 Referral services	
	2.4 Research work, clerical work	
	2.5 Library work	
	2.6 All other non physical work	

TABLE 2.1 (Page 2 of 3)

OCCUPATION BY MAJOR WORK CATEGORY

MAJOR WORK CATEGORY	SUB-CATEGORY	OCCUPATION
3.0 PARKS, RECREATION AND CIVIC DEVELOPMENT	3.1 Trail clearing, ski trails, sidewalks, access road/ramps	. maintenance (National Park) . labourer (municipality, government) . tree maintenance . assistant surveyor . information agent . responsible for recreative activities (playground) . maintenance (playground)
	3.2 Habitat/campground improvement and development	
	3.3 River and stream cleaning	
	3.4 General clean up and maintenance	
	3.5 Surveying	
	3.6 Tourism development/ information	
	3.7 General work in a municipality	

TABLE 2.1 (Page 3 of 3)

OCCUPATION BY MAJOR WORK CATEGORY

MAJOR WORK CATEGORY	SUB-CATEGORY	OCCUPATION
4.0 SILVICULTURE	4.1 Tree planting	. tree planting . gardener (municipality, government) . tree maintenance (municipality) . labourer (municipality or government)
	4.2 à 4.5 General nursury work	
5.0 ARCHEOLOGICAL WORK	5.1 Archeological field work	. research assistant (university, government) . information agent
	5.2 Restauration work	
	5.3 Research, lab. work	
	5.4 Work at museum or historical site	
6.0 MISCELLANEOUS	6.1 Work in cemetery	. maintenance (cemetery) . general work activities (recycling industry) . office employee . maintenance (church)
	6.2 Recycling	
	6.3 General clerical work (non social)	
	6.4 Physical work for the parish/church	

In other types of jobs, such as group leader jobs, certain office jobs and information clerk jobs, similar tasks are performed but in quite different working environments.

When it came to assigning wage rates for such similar jobs, these jobs were considered separately in terms of their different classifications, so that the wages assigned would reflect market rates accurately.

2.3 ASSIGNMENT OF WAGE RATES BY ACTIVITY

The wages assigned to the various job categories were based on the rates published in "Wage Rates, Salaries and Working Hours" by Labour Canada and on interviews with personnel officers in hospitals, municipal offices, nursing homes, universities, recreational centres, private companies, cemeteries and museums. The purpose of these interviews was twofold: to determine current wage rates and to verify the information obtained in the Labour Canada publication.

Table 2.2 below lists the jobs, as in Table 2.1, in addition to the source of the wage rates.

TABLE 2.2

(Page 1 of 2)

OCCUPATIONS CONSIDERED FOR MAJOR WORK CATEGORY

MAJOR WORK CATEGORIES	OCCUPATIONS CONSIDERED	INTERVIEWS	LABOUR CANADA
1.0 CONSTRUCTION WORK	. labourer	●▲■	A
	. janitor	●■	A
SOCIAL SERVICE ACTIVITIES NON PHYSICAL WORK	. hospital helper	●	A
	. work with the eldery	●	
	. work with handicapped	● r	NA
	. cook assistant	●▲	A
	. responsible for recreative activities (hospital) (1)	●	A
	. messenger	●▲■◆	A (2)
	. receptionist	●▲■◆	A (3)
	. office clerk	●▲■	A
	. library technician		NA
	. daycare work	▲	NA
	. labourer (hospital institution) (établissement hospitalier)	●	A
PARKS, RECREATION AND CIVIL DEVELOPMENT	. maintenance (national parks)	◆	NA
	. labourer (municipality or government)	◆■	A
	. gardener (municipality or government)	◆■	A
	. tree maintenance (municipality)	◆■	NA
	. assistant surveyor	◆■	NA
	. information agent	◆■	NA
	. responsible for recreative activities (playround)	■	NA
	. maintenance (playground)	■	NA
SILVICULTURE	. tree planting	◆	NA
	. gardener (municipality or government) (4)	■◆	A
	. tree and plant maintenance (5)	■◆	NA
	. labourer (municipality or government)	■◆	A
ARCHEOLOGICAL WORK	. research assistant (university or gouvernment)	◆ u	NA
	. information agent (museum)	◆ m	NA

MAJOR WORK CATEGORIES	OCCUPATIONS CONSIDERED	INTERVIEWS	LABOUR CANADA
Miscellaneous	. maintenance in a cemetery	C	NA
	. general work in a recycling firm	re	NA
	. office employee	●▲■◆	A
	. maintenance employee (church)	+	NA

LEGEND		
	▲	private sector
	●	hospital
	■	municipality
	◆	government
	u	university
	c	cimetery
	r	recreational center
	re	recycling industry
	+	church
	m	museum
	A	available
	NA	not available

NOTES

1. Generally this person is responsible for a group of volunteers affected directly to beneficiaries.

2. Classified as office clerK.

3. Classified as junior secretary.

4-5 When the gardener is working in a nursury or a botanical garden, he will be responsible for the personnel affected to tree and plant maintenance. In that special case, the gardener is considered as a conceptor in floral arrangments.

The major difference between the two sources of data (the Labour Canada survey and the interviews with personnel officers) resides with the wage rates. The Labour Canada survey indicates average wages for certain types of jobs in large urban centres, whereas the interviews with staffing officers from the governments (Quebec, Ontario, Canada), the municipalities (Montreal, Toronto), the universities (Montréal and UQAM) and the hospitals (Notre-Dame, Sacre-Coeur and Ste. Justine and rates from the public hospitals in Ontario), to name just a few, reflect base rates for the various job categories. We believe, however, that the wage data obtained from the interviews is sufficiently representative to be used as a basis for determining the wages for the tasks performed by the Katimavik participants, since these wages are those provided by major sources of employment.

One other wage rate, the minimum wage in each province, was taken into consideration. This wage rate, as explained in the next section, was used to construct the minimum-wage scenario.

2.4 LIMITATIONS OF VARIOUS WAGE RATES

This step involves assessing as accurately as possible the wage rates for the various job descriptions supplied by Katimavik. Three scenarios were used in the process of establishing adequate wage rates for the job descriptions.

In the first scenario, the average wage for a job category was used, if the data was available. This average rate, generally obtained from the Labour Canada survey, takes into consideration all workers in one category in a particular region without taking experience, seniority, education or worker's level into account.

This scenario may therefore reflect wages that are too high for the Katimavik workers given their limited experience.

In the second scenario, the base rate for a job category was used. This wage rate was obtained from the human resources officers in various organizations that were likely to hire the same type of workers as those who worked on the Katimavik project. The base wage corresponds in all cases to the wage given to workers in a category on the lowest end of the wage scale. This scenario may well apply to the jobs carried out by the Katimavik workers, because it represents workers with little experience.

In the third scenario, the minimum wage in effect in the various provinces was used. Initially this wage rate was assigned to jobs normally paid at this rate and also to other jobs paid at this rate when they were performed by non-professionals. An example of this would be painting contracts granted to summer students and home interior renovations done by friends and neighbours.

Occasionally, in light of the description given of the task, a job falls into the category of voluntary work. For instance, with respect to jobs that involve working with sick people in a hospital and senior citizens in a nursing home, a person in charge of planning the activities and supervising a team of volunteers would be paid; however, a person who works with sick people or senior citizens and keeps them company would not.

In such cases, no wage rate was assigned to the work performed by the Katimavik participants.

The following chapter describes each of the wage rates and to which work category these were associated with.

3.0 WAGE RATES

3.1 WAGE RATES USED

As previously stated, three wage rates were considered:

(1) the average wage for the occupation, as established by the Labour Canada survey. This wage rate was used in scenario 1.

(2) the base wage for the occupation determined from interviews. This wage rate was used in scenario 2.

(3) the minimum wage in effect in each province, which corresponds to scenario 3.

The wage rate analysis may appear very detailed; however, after assigning occupations to the project categories, it was necessary to find a representative wage rate for each of the three scenarios, by category.

The first step involved deciding which scenario(s) to assign to each project category. The second step consisted in averaging the wage rates assigned to a particular project category for each of the scenarios considered for that category. Finally, a scenario was selected for each of the project categories. This last exercise is described in section 3.2.

This methodology was followed in order to establish the wage rates which corresponded most closely to the work activities carried out by the Katimavik participants.

Table 3.1 which follows presents the job classification established by Katimavik and the corresponding wages for each of the scenarios. The wage rates used in scenarios 1 and 2 of Table 3.1 and which correspond to the project sub-categories are based on the average of weekly wage rates for the occupations in Table 2.1 in these same sub-categories.

Boxes in Table 3.1 containing "N.C." (not considered) indicate that those scenarios were not considered for that particular type of occupation. On the other hand, a "0" (zero) in the second box of scenario 3 indicates that some, or most of these jobs, are not remunerated but rather are performed on a volunteer basis.

In the case of scenario 1, wage rates appearing in Table 3.1 are obtained by calculating the average, for both men and women, of the "average" figures drawn from the Labour Canada survey, given an equal number of male and female participants in Katimavik projects.

The wage rates in the Labour Canada survey were those in effect in 1982. They are presented in Table 3.2. These rates were adjusted according to the inflation rates registered between December 1982 and May 1984. The inflation rates used were obtained from the consumer price indices for large metropolitan areas recorded by Statistics Canada. These levels of inflation appear in Table 3.3.

In the case of scenario 2, a series of interviews were carried out with people likely to hire employees who would perform approximately the same function as the participants in the Katimavik program. The wage rates obtained during these interviews are for 1984 and were expressed in hourly, weekly or annual rates of pay. Thus, the wage rates had to be converted to a weekly basis so that value of the work performed by Katimavik participants could be calculated. This was necessary because the value of the work could

TABLE 3.1 (Page 1 of 8)

WAGE RATES BY WORK CATEGORY AND FOR ALL SCENARIOS

MAJOR WORK CATEGORY	SUB-CATEGORY		WEEKLY WAGE RATES BY SUB-CATEGORY AND SCENARIO			
					SCENARIO 3	
			SCENARIO 1	SCENARIO 2	MIN. WAGE	VOL. WORK
1.0 CONSTRUCTION WORK	1.1 Building					
		Atlant.	304.50	367.13	141	
		Quebec	337.13	407.92	150	
		Ontario	324.56	345.20	153.75	
		Prairies	359.75	392.27	150.75	
		Pacific	464.25	493.14	136.88	
	1.2 Renovations					
		Atlant.	304.50	367.13	141	
		Quebec	337.13	407.92	150	
		Ontario	324.56	345.20	153.75	
		Prairies	359.75	392.27	150.75	
		Pacific	464.25	493.14	136.88	
	1.3 General light building Maintenance and repair					
		Atlant.	309.19	379.00	141	
		Quebec	300.38	367.96	150	
		Ontario	332.63	305.20	153.75	
		Prairies	369.75	317.92	150.75	
		Pacific	403.88	372.20	136.88	
	1.4 Energy Conservation work					
		Atlant.	304.50	367.13	N.C.	
		Quebec	337.13	407.92	N.C.	
		Ontario	324.56	345.20	N.C.	
		Prairies	359.75	392.27	N.C.	
		Pacific	464.25	493.14	N.C.	

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WAGE RATES BY WORK CATEGORY AND FOR ALL SCENARIOS

MAJOR WORK CATEGORY	SUB-CATEGORY		WEEKLY WAGE RATES BY SUB-CATEGORY AND SCENARIO			
					SCENARIO 3	
			SCENARIO 1	SCENARIO 2	MIN. WAGE	VOL. WORK
2.0 SOCIAL SERVICE ACTIVITIES - NON PHYSICAL WORK	2.1 General hospital work					
		Atlant.	298.87	249.00	141	0
		Quebec	335.44	290.43	150	0
		Ontario	320.90	296.78	153.75	0
		Prairies	363.68	322.77	150.75	0
		Pacific	363.81	339.00	136.88	0
	2.2 General work with the elderly, the handicapped, and the disadvantaged					
		Atlant.	N.C.	184.65	141	0
		Quebec	N.C.	225.26	150	0
		Ontario	N.C.	238.79	153.75	0
		Prairies	N.C.	243.60	150.75	0
		Pacific	N.C.	262.16	136.88	0
	2.3 Referral services					
		Atlant.	N.C.	285.90	141	
		Quebec	N.C.	315.04	150	
		Ontario	N.C.	290.15	153.75	
		Prairies	N.C.	311.99	150.75	
		Pacific	N.C.	333.51	136.88	
	2.4 Research work, clerical work					
		Atlant.	N.C.	295.44	141	
		Quebec	N.C.	325.55	150	
		Ontario	N.C.	273.07	153.75	
		Prairies	N.C.	260.81	150.75	
		Pacific	N.C.	313.87	136.88	

TABLE 3.1 (Page 3 of 8)

WAGE RATES BY WORK CATEGORY AND FOR ALL SCENARIOS

MAJOR WORK CATEGORY	SUB-CATEGORY		WEEKLY WAGE RATES BY SUB-CATEGORY AND SCENARIO			
			SCENARIO 1	SCENARIO 2	SCENARIO 3	
					MIN. WAGE	VOL. WORK
2.0 (Cont'd)	2.5 Library work					
		Atlant.	280.21	242.33	141	
		Quebec	307.06	265.35	150	
		Ontario	296.16	272.83	153.75	
		Prairies	339.95	313.42	150.75	
		Pacific	333.41	306.45	136.88	
	2.6 All other non physical work					
		Atlant.	N.C.	235.42	141	0
		Quebec	N.C.	276.77	150	0
		Ontario	N.C.	276.35	153.75	0
		Prairies	N.C.	292.29	150.75	0
		Pacific	N.C.	316.21	136.88	0

TABLE 3.1 (Page 4 of 8)

WAGE RATES BY WORK CATEGORY AND FOR ALL SCENARIOS

MAJOR WORK CATEGORY	SUB-CATEGORY		WEEKLY WAGE RATES BY SUB-CATEGORY AND SCENARIO			
			SCENARIO 1	SCENARIO 2	SCENARIO 3	
					MIN. WAGE	VOL. WORK
3.0 PARKS, RECREATION AND CIVIC DEVELOPMENT	3.1 Trail clearing, ski trails, sidewalk, access road/ramps					
		Atlant.	304.50	380.84	N.C.	
		Quebec	337.13	419.66	N.C.	
		Ontario	324.56	411.27	N.C.	
		Prairies	369.75	442.23	N.C.	
		Pacific	464.25	472.72	N.C.	
	3.2 Habitat/campground improvement and development					
		Atlant.	304.50	461.60	141	
		Quebec	337.13	461.60	150	
		Ontario	324.56	428.36	153.75	
		Prairies	369.75	428.36	150.75	
		Pacific	464.25	428.36	136.88	
	3.3 River and stream cleaning					
		Atlant.	N.C.	160	141	
		Quebec	N.C.	160	150	
		Ontario	N.C.	160	153.75	
		Prairies	N.C.	160	150.75	
		Pacific	N.C.	160	136.88	
	3.4 General cleanup and maintenance					
		Atlant.	304.50	189.00	141	
		Quebec	337.13	210.00	150	
		Ontario	324.56	177.71	153.75	
		Prairies	369.75	201.94	150.75	
		Pacific	464.25	253.87	136.88	

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WAGE RATES BY WORK CATEGORY AND FOR ALL SCENARIOS

MAJOR WORK CATEGORY	SUB-CATEGORY		WEEKLY WAGE RATES BY SUB-CATEGORY AND SCENARIO			
			SCENARIO 1	SCENARIO 2	SCENARIO 3	
					MIN. WAGE	VOL. WORK
3.0 (Cont'd)	3.5 Surveying					
		Atlant.	N.C.	245.82	141	
		Quebec	N.C.	270.88	150	
		Ontario	N.C.	272.48	153.75	
		Prairies	N.C.	292.99	150.75	
		Pacific	N.C.	313.20	136.88	
	3.6 Tourism development/ information					
		Atlant.	N.C.	295.90	141	0
		Quebec	N.C.	315.04	150	0
		Ontario	N.C.	290.15	153.75	0
		Prairies	N.C.	311.99	150.75	0
		Pacific	N.C.	333.51	136.88	0
	3.7 General work in a municipality					
		Atlant.	304.50	379.00	141	
		Quebec	337.13	367.96	150	
		Ontario	324.56	305.20	153.75	
		Prairies	369.75	317.92	150.75	
		Pacific	464.25	372.20	136.88	

TABLE 3.1 (Page 6 of 8)

WAGE RATES BY WORK CATEGORY AND FOR ALL SCENARIOS

MAJOR WORK CATEGORY	SUB-CATEGORY		WEEKLY WAGE RATES BY SUB-CATEGORY AND SCENARIO			
					SCENARIO 3	
			SCENARIO 1	SCENARIO 2	MIN. WAGE	VOL. WORK
4.0 SILVICULTURE	4.1 Tree planting					
		Atlant.	N.C.	625	N.C.	
		Quebec	N.C.	625	N.C.	
		Ontario	N.C.	625	N.C.	
		Prairies	N.C.	625	N.C.	
		Pacific	N.C.	625	N.C.	
	4.2 à 4.5 General nursury work					
		Atlant.	274.50	427.59	141	
		Quebec	274.50	427.59	150	
		Ontario	274.50	396.80	153.75	
		Prairies	274.50	396.80	150.75	
		Pacific	274.50	396.80	136.88	

TABLE 3.1 (Page 7 of 8)

WAGE RATES BY WORK CATEGORY AND FOR ALL SCENARIOS

MAJOR WORK CATEGORY	SUB-CATEGORY		WEEKLY WAGE RATES BY SUB-CATEGORY AND SCENARIO			
					SCENARIO 3	
			SCENARIO 1	SCENARIO 2	MIN. WAGE	VOL. WORK
5.0 ARCHEOLOGICAL WORK	5.1 Archeological field work					
		Atlant.	N.C.	228.81	141	
		Quebec	N.C.	243.98	150	
		Ontario	N.C.	240.70	153.75	
		Prairies	N.C.	252.79	150.75	
		Pacific	N.C.	264.71	136.88	
	5.2 Restauration work					
		Atlant.	N.C.	228.81	141	
		Quebec	N.C.	243.98	150	
		Ontario	N.C.	240.70	153.75	
		Prairies	N.C.	252.79	150.75	
		Pacific	N.C.	264.71	136.88	
	5.3 Research, lab. work					
		Atlant.	N.C.	228.81	141	
		Quebec	N.C.	243.98	150	
		Ontario	N.C.	240.70	153.75	
		Prairies	N.C.	252.79	150.75	
		Pacific	N.C.	264.71	136.88	
	5.4 Work at museum or historical site					
		Atlant.	N.C.	228.81	141	0
		Quebec	N.C.	243.98	150	0
		Ontario	N.C.	240.70	153.75	0
		Prairies	N.C.	252.79	150.75	0
		Pacific	N.C.	264.71	136.88	0

TABLE 3.1 (Page 8 of 8)

WAGE RATES BY WORK CATEGORY AND FOR ALL SCENARIOS

MAJOR WORK CATEGORY	SUB-CATEGORY		WEEKLY WAGE RATES BY SUB-CATEGORY AND SCENARIO			
			SCENARIO 1	SCENARIO 2	SCENARIO 3	
					MIN. WAGE	VOL. WORK
6.0 MISCELLANEOUS	6.1 Work in cemetery					
		Atlant.	304.50	461.60	141	
		Quebec	337.13	461.60	150	
		Ontario	324.56	428.36	153.75	
		Prairies	369.75	428.36	150.75	
		Pacific	464.25	428.36	136.88	
	6.2 Recycling					
		Atlant.	N.C.	141	141	0
		Quebec	N.C.	150	150	0
		Ontario	N.C.	144.38	153.75	0
		Prairies	N.C.	150.62	150.75	0
		Pacific	N.C.	136.88	136.88	0
	6.3 General clerical work (non social service)					
		Atlant.	280.21	242.23	141	
		Quebec	307.06	265.35	150	
		Ontario	296.16	272.83	153.75	
		Prairies	339.95	313.42	150.75	
		Pacific	333.14	306.45	136.88	
	6.4 Physical work for the parish/church					
		Atlant.	N.C.	267.41	141	
		Quebec	N.C.	259.62	150	
		Ontario	N.C.	215.84	153.75	
		Prairies	N.C.	224.31	150.75	
		Pacific	N.C.	262.61	136.88	

NOTES FOR TABLE 3.1
(1) N.C. Scenario not considered for the occupation.
(2) MIN. WAGE Minimum wage for 37.5 hours or work.
(3) VOL. WORK Volunters work.

only be obtained by multiplying the number of work weeks by a weekly wage rate. As there was no set number of hours established per work week, an average work week of 37.5 hours was taken as the basis for a weekly wage rate. This figure was adopted since the number of hours worked per week by an individual varied between 35 and 40 hours.

As most of the rates obtained were for the regions of Quebec and Ontario, it was necessary to estimate values for the Atlantic, Prairie and Pacific regions. These approximations were established on the basis of wage differential ratios between provinces, as calculated according to the Labour Canada survey. These ratios appear in Table 3.4.

Finally, the minimum weekly wage rate was calculated on the basis of a 37.5 hour work week and was in effect in April 1984.

As a general rule, the base wage rates (scenario 2) given in Table 3.1 are higher than the average rates per occupation (scenario 1). This situation may appear surprising as it is rare that a base rate is higher than the average wage rate for an occupation. However, the situation may be explained by the fact that information obtained in interviews applies for the most part to unionized jobs (see Table 3.6 - public hospitals, government and municipalities) and it is widely known that unionized workers receive above-average wages for any given job. The average wage per occupation obtained from the Labour Canada survey takes into account the wage rates of both unionized and non-unionized workers. The inclusion of wage rates for non-unionized workers in the average wage rate would lower the average basic wage rate.

TABLE 3.3

RATE OF INFLATION BY URBAN REGION IN CANADA, BETWEEN THE END OF THE YEAR 1982 AND MAY 1984

REGION	URBAN REGION	RATE OF INFLATION	
		URBAN REGION (%)	AVERAGE BY URBAN REGION (%)
Atlantic	St John's Charlottetown Halifax St John	12,3 10,3 11,6 12,9	11,8
Quebec	Quebec Montreal	10,5 10,8	10,7
Ontario	Ottawa Toronto Thunder Bay	12,5 11,5 11,9	11,97
Prairies	Winnipeg Regina Saskatoon Edmonton Calgary	10,5 11,3 10,8 9,0 7,4	9,8
Pacific	Vancouver	10,4	10,4
Canada	AVERAGE	10,4	10,4

Source: Statistics Canada

TABLE 3.4

RATIOS ALLOWING COMPARISONS BETWEEN PROVINCES FOR THE SAME OCCUPATION

RATIOS	ATLANTIC	QUEBEC	ONTARIO	ONTARIO
OCCUPATIONS	QUEBEC	ONTARIO	PRAIRIES	PACIFIC
1. labourer	.90	.85	.88	.70
2. janitor	1.03	.83	.96	.82
3. cook assistant	.76	1.03	.99	.88
4. hospital helper	.83	1.11	.97	.86
5. receptionist	.91	1.03	.92	.89
6. office clerk	.88	1.09	.95	.88
7. messenger	.95	.96	.75	.90
8. gardener	1.00	.93	1.00	1.00
AVERAGE	.91	.98	.93	.87

TABLE 3.5

MINIMUM WAGES EFFECTIVE IN CANADA, APRIL 1984

CANADIAN PROVINCES	18 YEARS OF AGE AND OVER	UNDER 18 YEARS OF AGE	EFFECTIVE DATE
Federal	3.50 (1)	3.25 (1)	May 1st 1981
Alberta	3.80	3.65 (5)	May 1st 1981
British Columbia	3.65	3.00	December 1st 1980
Manitoba	4.00	3.55	July 1st 1982
New Brunswick	3.80 (2)	3.80 (2)	October 1st 1982
Newfoundland	3.75 (3)	(4)	January 1st 1983
Nova Scotia	3.75	3.40	December 1st 1982
Ontario	3.85	3.00 (6)	March 1st 1984
learner	3.75		March 1st 1984
employee serving liquor on licensed premises	3.35		March 1st 1984
construction workers	4.10		March 1st 1984
Prince Edward Island	3.75	3.00	October 1st 1982
Quebec	4.00	3.54	October 1st 1981
waiter	3.28	2.95	October 1st 1981
Saskatchewan	4.25	(2)	July 1 st 1981
Northwest Territories	4.25 (1)	3.75 (7)	August 1st 1982
Yukon Territory	3.60	(2)	May 1st 1981

NOTES:
(1) Applies to employees 17 years and over.
(2) No special rates established with respect to age.
(3) Applied to employees 16 years and over.
(4) Minimum wages does not apply to employees under 16 years of age.
(5) Rate of $ 3.30 applicable to students employed on a part-time basis outside of school hours during school years.
(6) Applicable to students under 18 years of age, whose weekly hours do not exceed 28 hours per week or those employed during a school holiday.
(7) Applicable to employees under 17 years of age.

TABLE 3.6

WEEKLY WAGE RATES BY OCCUPATION USED FOR SCENARIO 2 (1984)

	REGIONS				
	ATLANTIC	QUEBEC	ONTARIO	PRAIRIES	PACIFIC
1. labourer	367.13	407.92	345.20	392.27 (5)	493.14 (5)
2. janitor	379.00	367.96	305.20	317.92 (2)	372.20 (2)
3. beneficiary intendent	228.39	300.51	333.20	336.57 (1)	387.77 (1)
4. assistant cook	243.39	320.25	329.20	339.38 (7)	374.09 (7)
5. organizer of recreative activities (hospital)	272.75 (1)	328.62	322.05	332.01 (1)	374.48 (1)
6. messenger	242.00	254.74	245.20	326.93 (8)	272.44 (8)
7. receptionist	252.85	277.86	286.65	311.58 (9)	321.63 (9)
8. office clerk	231.84	263.45	286.65	301.74 (10)	325.28 (10)
9. recreative activity organizer (playground)	238.27 (6)	262.56	257.31 (6)	276.68 (6)	295.76 (6)
10. maintenance (playground)	189.00 (5)	210.00	177.71 (5)	201.94 (5)	253.87 (5)
11. tree maintenance	451.60 (3)	461.60	428.36 (3)	428.36 (3)	428.36 (3)
12. gardener	427.59	427.59	396.80	396.80 (4)	396.80 (4)
13. library technician	295.44 (6)	325.55	273.07	260.81 (6)	313.87 (6)
15. daycare work	224.61 (6)	247.50	242.55 (6)	260.81 (6)	278.79 (6)
16. National Park maintenance employee	380.84 (6)	419.66	411.27 (6)	442.23 (6)	472.72 (6)
17. assistant surveyor	245.82 (6)	270.88	272.48	292.99 (6)	313.20 (6)
18. tourist guide	285.90 (6)	315.04	290.15	311.99 (6)	333.51 (6)
19. museum guide	(12)	(12)	(12)	(12)	(12)
20. tree planting	625.00 (4)	625.00 (4)	625.00 (4)	625.00 (4)	625.00 (4)
21. "Summer Canada Program" participant	160.00 (4)	160.00 (4)	160.00 (4)	160.00 (4)	160.00 (4)
22. research assistant	294.61 (6)	327.95	321.39 (6)	345.58 (6)	369.41 (6)
23. work with handicapped people	141.00 (11)	150.00 (11)	144.38 (11)	150.62 (11)	136.88 (11)
24. recycling activities	141.00 (11)	150.00 (11)	144.38 (11)	150.62 (11)	136.88 (11)
25. maintenance activities (church)	267.41 (2)	259.62	215.34	224.31 (2)	262.61 (2)

NOTE
(1) Same ratio than for beneficiary intendent
(2) Same ratio than for janitor
(3) Same ratio than for gardener
(4) Same ratio for all regions
(5) Same ratio than for labourer
(6) Average ratio between these two provinces: 0.91
(7) Same ratio than for assistant cook
(8) Same ratio than for messenger
(9) Same ratio than for receptionist
(10) Same ratio than for office clerk
(11) Corresponds to minimum wage
(12) Volunteer work

3.2 WAGE RATES SELECTED

In order to estimate the total value of the inputs into the Katimavik program, a wage rate scenario most accurately reflecting real conditions had to be selected for each of the project sub-categories.

The main reasons given for selecting one rate of pay over another, especially with respect to those in scenarios 1 and 2, are the following:

(1) the importance and complexity of the duties involved in the occupation carried out;

(2) the presence of established work structures for this type of employment. Established structures refer to professional associations, strong unions, or high scholastic requirements.

As the work increases in importance or complexity, the pay rate attributed to that work increases accordingly. Similarly, if there are large organized structures in the work place, it is highly probable that rates of pay will be substantially higher.

The rates of pay selected for each sub-category are summarized in the table below. In order to test the validity of the results, calculations were also carried out for one scenario at a time. All results are given in the following chapter.

TABLE 3.7 (Page 1 of 3)

SCENARIO CONSIDERED BY WORK CATEGORY

MAJOR WORK CATEGORY	SUB-CATEGORY	SCENARIO CONSIDERED BY WORK CATEGORY
1.0 CONSTRUCTION WORK	1.1 Building	SCENARIO 1 was considered so as to take into account unionized and non-unionized workers in this category.
	1.2 Renovations	SCENARIO 3 was adopted as the work carried out was of secondary importance.
	1.3 General light building maintenance and repairs	SCENARIO 3 was adopted as the work carried out appeared to be of secondary importance.
	1.4 Energy conservation work	SCENARIO 1 was selected as this work requires a higher level of expertise and ability than in 1.1, 1.2 and 1.3.
2.0 SOCIAL SERVICE NON PHYSICAL WORK	2.1 General hospital	SCENARIO 2 was considered due to strong unionization in this area.
	2.2 General work with the elderly, the handicapped and the disadvantaged.	SCENARIO 3, without remuneration, was retained due to the volunteer nature of the work and the absence of unions for this type of service.
	2.3 Referral services	SCENARIO 3 was retained due to the very general nature of this work.
	2.4 Research work, clerical work	SCENARIO 2 was retained due to the research activities involved in this type of work.
	2.5 Library work	SCENARIO 2 was considered as this work is very similar to job descriptions for a library technician.
	2.6 All other non-physical work	SCENARIO 3, with remuneration, was retained given the general nature of the work performed.

TABLE 3.7 (Page 2 of 3)

SCENARIO CONSIDERED BY WORK CATEGORY

MAJOR WORK CATEGORY	SUB-CATEGORY	SCENARIO CONSIDERED BY WORK CATEGORY
3.0 PARKS, RECREATION AND CIVIC DEVELOPMENT	3.1 Trail clearing, ski trails, sidewalks, access roads/ramps	SCENARIO 2 was considered due to the similarity of this work tc that of a the national park maintenance employee or a municipal works labourer.
	3.2 Habitat/campground improvement and development	SCENARIO 3 was retained given the very little specialization required for this type of employment, which essentially involves general outdoor maintenance.
	3.3 River and stream cleaning	SCENARIO 3 was retained as this type of employment is usually carried out by students during the summer.
	3.4 General clean up and maintenance activities	SCENARIO 2 was considered, not because the work is specialized, but rather because it corresponds to that of a playground monitor and because this pay rate was available.
	3.5 Surveying	SCENARIO 2 was considered given the specific nature of this type of employment.
	3.6 Tourism development/ information	SCENARIO 2 was considered as the job description for this work corresponds to that of an information officer in the public sector.
	3.7 General work in a municipality	SCENARIO 2 was considered given the similarity of this work to that of a municipal works labourer.

TABLE 3.7 (Page 3 of 3)

SCENARIO CONSIDERED BY WORK CATEGORY

MAJOR WORK CATEGORY	SUB-CATEGORY	SCENARIO CONSIDERED BY WORK CATEGORY
4.0 SILVICULTURE	4.1 Tree planting	SCENARIO 2 was applied here as the work carried out by the participants corresponded to the job description provided.
	4.2 to 4.5 General nursery work	SCENARIO 1, or the average pay rate for a gardener, was applied as it applies to the work carried out within these jobs.
5.0 ARCHEOLOGICAL WORK	5.1 to 5.5 Research assistant work in archeology	SCENARIO 2 was considered given the similarity of the duties described to those of a university or field research assistant.
6.0 MICELLANEOUS	6.1 Work in a cemetery	SCENARIO 3 was considered as most cemetery maintenance employees are not specialized.
	6.2 Recycling	SCENARIO 3 was applied as the interviews confirmed that these workers were not specialized and were paid minimum wages.
	6.3 General clerical work (non-social)	SCENARIO 1 was selected over SCENARIO 2 as office jobs outside the social services are less highly unionized.
	6.4 Physical work for the parish/church	SCENARIO 2 was considered given the correspondence between this job description and that of a church maintenance worker.

4.0 PRESENTATION AND ANALYSIS OF RESULTS

This section outlines the value of the inputs into the Katimavik projects according to previously established categories. Two types of data will be analyzed: raw data and wage and operating costs.

4.1 Raw Data

The raw data corresponds to the basic parameters which Katimavik provided to Econosult at the beginning of the project. The parameters analyzed within this section consist of the number of project categories and the number of work weeks. Annual, regional and project category characteristics were also considered.

Before studying these variables in greater detail, it should be noted that results studied in this chapter are for the last four years. As the Katimavik year does not always correspond to the normal calendar year, results are thus given for Katimavik years. Therefore instead of referring to the years 1973-1983, the numbers 5,6,7 and 8 will be used for purposes of our analysis.

Regional results are given for the five Canadian regions: Atlantic, Quebec, Ontario, Prairies and Pacific. The Atlantic region comprises the following four provinces: New Brunswick, Nova Scotia, Prince Edward Island and Newfoundland. The Prairies include Manitoba, Saskatchewan, Alberta, the Northwest Territories. Finally, the Pacific region takes in British Columbia, and the Yukon. Regional results in this report are given by these names.

a) Number of project categories

(The results concerning the number of project categories and weeks worked are taken from Table B-3 in the annex.)

During years 5,6,7 and 8 a total 341 project categories were carried out across Canada, as follows:

- 65 in year 5
- 76 in year 6
- 98 in year 7
- 102 in year 8.

As evidenced by the above figures, the number of project categories accomplished by participants increased in each of the four years.

Table 4.1 below indicates the number of project categories per year for each of the regions.

TABLE 4.1

PROJECT CATEGORIES BY REGION

REGION	5	6	7	8	Total Region
Atlantic	11	13	18	14	56
Quebec	13	16	23	22	74
Ontario	15	16	18	25	74
Prairies	11	15	18	20	64
Pacific	15	16	21	21	73
Total by year	65	76	98	102	341

As can be seen from this table, the number of project categories in each of the regions increased in each of the four years, except in the Atlantic and Quebec regions during the last year.

With respect to regional totals, Quebec and Ontario led with 74 project categories each, while the Pacific region had 73, the Prairies 64, and the Atlantic region 56.

The next section, which deals with the number of weeks worked, provides a clearer indication of which region contributed the most work weeks to Katimavik participants.

b) Number of Weeks Worked

During years 5, 6, 7 and 8, Katimavik participants worked for a total of 167 267 weeks in Canada and, as was true for the number of project categories, the number of work weeks increased annually. 17 325 weeks were worked during year 5. This number increased to 21 758 weeks in year 6, and in year 7 almost tripled to reach 64 196 weeks. The highest total was recorded in year 8, with 64 348 weeks worked.

The total number of weeks worked reflects the same relative importance of the regions as previously found for the number of project categories. However, as indicated in Table 4.2, the total number of weeks worked clearly differentiates among the first three regions in terms of the number of project categories.

With respect to the number of weeks worked, the Quebec and Ontario regions are still separated only by a low margin; however, the Pacific region, in third place in terms of number of project categories, stands fifth. Given the importance

TABLE 4.2

WORKING WEEKS BY REGION

YEAR REGION	5	6	7	8	Total by Region	Working week by project, by region
Atlantic	3 402	4 053	10 624	7 736	25 815	460.98
Quebec	3 969	5 061	17 269	17 425	43 724	590.86
Ontario	3 465	4 200	15 255	21 464	44 384	599.78
Prairies	3 465	4 244	12 104	11 691	31 504	492.25
Pacific	3 024	4 200	8 944	6 032	22 200	304.11
Total by year	17 325	21 758	64 196	64 348	167 627	
AVERAGE BY YEAR (Working week by project/category)	266.54	286.29	655.06	630.86		491.57

of the province of Ontario with respect to population and economic activity, it is not surprising that of the five regions Ontario recorded the highest number of weeks worked. However, the slight difference between Quebec and Ontario can be explained by the nature of the Katimavik program, which requires that a participant complete at least one of the three projects he undertakes in a francophone region.

The average number of work weeks per project category provides a clear indication of the turning point achieved between years 6 and 7, when the number of work weeks per region increased more quickly than the number of project categories per region, thus explaining the very high average number of weeks worked per project category from year 7 on.

The number of work weeks per project category and per region over the four years shows that Quebec and Ontario were well above the national average, that the Prairies and Atlantic regions were average, and that the Pacific region recorded the shortest project durations.

The number of work weeks per category is also noteworthy. Without going into a detailed analysis, it can be seen that over the four years the three below-mentioned project subcategories have recorded a large number of work weeks.

- 1.1 Building
- 1.2 Renovations
- 3.0 Parks, Recreation and Civic Development

4.2 WAGES AND OPERATING COSTS

a) Summary of the Four Years

Table 4.3 below indicates the amount that would have been spent in wages if participants in the Katimavik projects had been paid, as well as the amount spent on materials and equipment by sponsors for each category of employment in each region (Atlantic, Quebec, Ontario, Prairies and Pacific). In addition, the total wages that could have been paid as well as the total costs in materials and equipment for all types of employment per region are provided below the table. This total represents the value of inputs of Katimavik projects for the entire four years, according to the region.

Finally, the grand total illustrates the total contribution of Katimavik in terms of salaries that could have been paid and in terms of materials and equipment. This result in 1984 dollars is as follows:

$58 707 071 (total) including:

i) $33 248 216 in potential salaries that would have been paid, and
ii) $25 458 855 in materials and equipment.

These totals were calculated on the basis of 1984 wage levels for the four years of Katimavik projects. Subsequently, simulations could be made using the wage levels of the years in question.

With respect to these totals, the following points should be noted:

TABLE 4.3

(Page 1 of 4)

TOTAL COSTS IN WAGES, AND FOR MATERIALS AND EQUIPMENT, BY REGION AND WORK CATEGORY, FOR KATIMAVIK YEARS 5 TO 8

WORK CATEGORY	ATLANTIC		QUEBEC		ONTARIO		PRAIRIES		PACIFIC	
	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.
1.0 CONSTRUCTION WORK										
1.1 Building	2 146 637	908 848	2 102 782	2 215 520	592 340	322 669	1 238 842	1 034 032	910 394	620 246
1.2 Renovations	386 297	344 123	1 374 900	1 861 281	691 226	808 545	750 678	718 267	263 895	402 240
1.3 General light building maintenance and repairs	69 731	11 290	141 600	62 534	208 485	146 454	198 086	415 381	50 233	66 740
1.4 Energy conservation work	7 199	1 250	23 262	32 250	0	0	2 958	525	0	0
SUB TOTAL 1.0	2 609 864	1 265 511	3 642 544	4 171 585	1 492 051	1 277 668	2 190 564	2 168 205	1 224 522	1 089 226
2.0 SOCIAL SERVICE ACTIVITIES NON PHYSICAL WORK										
2.1 General hospital work	41 832	14 120	56 053	18 810	227 134	4 995	265 962	352 900	8 814	0
2.2 General work with the elderly, the handicapped and the disadvantaged	0	34 280	0	86 287	0	364 549	0	207 545	0	138 765
2.3 Referral services	0	0	0	0	0	0	7 839	0	0	0
2.4 Research work, clerical work	72 045	15 900	345 087	70 533	124 410	33 521	140 726	119 239	108 825	9 774
2.5 Library work	25 408	1 500	124 360	20 880	57 891	11 896	69 375	4 741	21 343	0
2.6 All other non-physical work	172 490	86 930	344 255	190 397	565 356	199 376	551 581	388 829	481 332	515 037
SUB TOTAL 2.0	311 774	152 730	869 755	386 907	974 791	614 337	785 336	1 073 254	620 314	663 576

TABLE 4.3

(Page 2 of 4)

TOTAL COSTS IN WAGES, AND FOR MATERIALS AND EQUIPMENT, BY REGION AND WORK CATEGORY, FOR KATIMAVIK YEARS 5 TO 8

WORK CATEGORY	ATLANTIC		QUEBEC		ONTARIO		PRAIRIES		PACIFIC	
	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.
3.0 PARKS, RECREATION AND CIVIC DEVELOPMENT										
3.1 Trail clearing, ski trails, sidewalks, access road/ramps	368 943	42 730	371 819	102 224	893 502	290 740	176 450	18 265	159 307	14 306
3.2 Habitat/campground improvement and development	1 209 880	633 440	1 913 146	2 177 934	1 471 626	1 865 982	1 418 365	1 340 148	860 289	904 619
3.3 River and stream cleaning	0	0	23 100	10 457	62 370	32 500	19 899	19 100	34 493	36 640
3.4 General clean up and maintenance	131 355	19 400	189 630	130 752	297 131	131 195	354 606	191 338	318 962	141 396
3.5 Surveying	0	0	4 063	1 600	0	0	0	0	0	0
3.6 Tourism development/ information	33 736	8 750	645 832	192 359	448 282	217 550	217 457	85 607	258 137	61 010
3.7 General work in a municipality	187 984	35 270	858 097	393 131	745 298	555 449	678 276	318 996	160 790	141 650
SUB TOTAL 3.0	1 931 898	739 590	4 005 687	3 008 457	3 918 209	3 093 416	2 865 053	1 973 454	1 791 978	1 299 621

TABLE 4.3

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TOTAL COSTS IN WAGES, AND FOR MATERIALS AND EQUIPMENT, BY REGION AND WORK CATEGORY, FOR KATIMAVIK YEARS 5 TO 8

WORK CATEGORY	ATLANTIC		QUEBEC		ONTARIO		PRAIRIES		PACIFIC	
	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.
4.0 SILVICULTURE										
4.1 Tree planting	0	0	339 957	1 620	249 071	82 935	64 830	22 377	162 345	29 300
4.2 to 4.5 General nursery work										
4.2	14 000	5 985	4 392	410	19 215	0	98 160	482 815	57 096	0
4.3	0	0	0	0	114 192	46 078	0	0	0	0
4.4	77 133	11 070	43 920	20 342	314 699	145 880	57 096	29 165	122 161	92 350
4.5	91 132	41 717	98 151	97 630	20 862	8 450	19 764	58 914	70 821	33 700
SUB TOTAL 4.0	182 265	58 772	486 420	120 002	718 039	283 343	239 850	593 271	412 423	412 423
5.0 ARCHEOLOGICAL WORK										
5.1 Archeological field work	0	0	0	0	155 839	0	0	0	18 265	20 200
5.2 Restoration work	0	0	9 241	0	64 508	17 800	43 870	4 000	69 575	59 300
5.3 Research, lab. work	0	0	0	0	18 293	30 800	0	0	44 207	84 020
5.4 Work at museum or historical site	67 849	14 160	12 657	3 727	389 798	449 171	25 668	5 180	180 753	320 611
SUB TOTAL 5.0	67 849	14 160	21 898	3 727	628 438	497 771	69 538	9 180	312 800	484 131

TABLE 4.3

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TOTAL COSTS IN WAGES, AND FOR MATERIALS AND EQUIPMENT, BY REGION AND WORK CATEGORY, FOR KATIMAVIK YEARS 5 TO 8

WORK CATEGORY	ATLANTIC		QUEBEC		ONTARIO		PRAIRIES		PACIFIC	
	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.
6.0 MICELLANEOUS										
6.1 Work in cemetery	0	0	9 000	19 400	19 924	15 000	25 303	18 400	0	0
6.2 Recycling	28 534	24 065	77 425	37 985	47 858	43 825	0	0	78 778	29 000
6.3 General clerical work (non social)	12 596	830	50 947	2 310	94 339	39 896	40 023	18 955	80 924	16 075
6.4 Physical work for the parish/church	64 187	100	171 963	44 998	0	0	23 328	0	0	0
SUB TOTAL 6.0	105 317	24 995	309 335	104 693	162 121	98 721	88 654	37 355	153 530	45 075
TOTAL	5 208 967	2 255 758	9 335 639	7 795 371	7 893 649	5 865 256	6 238 994	5 854 719	4 570 967	3 687 751
GRAND TOTAL (WAGES + MATERIALS AND EQUIPMENT)	Wages + Operation costs (materials and equipment) 33 248 216 $ + 25 458 855 $ = 58 707 071 $									

1) the categories of employment that contributed the greatest amount in terms of wages are construction work and parks, recreation and civic development. Of the total 167 627 weeks worked over the four years, 118 997 weeks (or 71.0%) were in these two categories. The amount representing wages varies in terms of wage rates as well as man hours spent on the work sites.

2) Employment categories 1 and 3 also generated the most materials and equipment. Of the total $25 458 855 paid for materials and equipment, $20 037 505 was spent by sponsors participating in these two categories of employment. Operating costs for the two categories represented 78% of total operating costs in all categories.

The wage equivalent was obtained on the basis of wage rates of the different scenarios applied to the number of work weeks per category of employment in each region over the four years of the Katimavik program. Materials and equipment costs represent the sum of the various expenditures in one category of employment over the four years of the Katimavik program.

If wages were calculated on the basis of each individual scenario, scenario 1 would amount to $41 807 874 and for scenarios 2 and 3 the totals would be $60 536 779 and $21 745 946, respectively. Thus, scenario 2 represents the highest wage total, scenario 1 the second highest, and scenario 3, the lowest.

b) Annual Results

In this section, the results obtained from Table 4.3 are broken down per year for each of the regions. Table 4.4 indicates the value of salaries potentially paid on an annual basis as well as operating costs related to materials and equipment assumed by the sponsors.

TABLE 4.4

TOTAL COST IN WAGES AND SPONSOR COSTS PER KATIMAVIK YEARS

KATIMAVIK YEARS		TOTAL COSTS (1)	COST IN WAGES	SPONSOR COSTS
YEAR 5	ATL	971 614	669 918	302 695
	QUE	1 439 968	766 161	673 807
	ONT	1 045 191	629 703	415 488
	PRAIR	1 248 888	656 147	592 741
	PACIF	1 459 194	657 621	801 573
TOTAL		6 164 855	3 378 551	2 786 304
YEAR 6	ATL	1 208 567	801 431	407 136
	QUE	1 929 757	1 035 191	894 566
	ONT	1 590 619	749 388	841 231
	PRAIR	2 302 785	811 555	1 491 230
	PACIF	1 584 278	709 644	874 634
TOTAL		8 616 006	4 107 209	4 508 797
YEAR 7	ATL	2 945 773	2 019 710	926 063
	QUE	7 098 587	3 494 587	3 604 000
	ONT	5 255 316	2 917 035	2 338 281
	PRAIR	3 971 945	2 361 109	1 610 836
	PACIF	2 684 930	1 713 468	971 462
TOTAL		21 956 551	12 505 909	9 450 642
YEAR 8	ATL	2 338 771	1 718 907	619 864
	QUE	6 662 698	4 039 700	2 622 998
	ONT	5 867 779	3 597 523	2 270 256
	PRAIR	4 570 095	2 410 183	2 159 912
	PACIF	2 530 316	1 450 234	1 040 082
TOTAL		21 969 659	13 256 547	8 713 112
GRAND TOTAL 4 YEARS		58 707 071	33 248 216	25 458 855

NOTE (1): "Total costs" corresponds to the sum between "cost in wages" and "sponsor costs".

The following are the most important conclusions to be drawn from the table:

1) First, the total value of the projects increased each year, especially in years 7 and 8. This increase was manifested by increases both in wage payments potentially made and in purchases of materials and equipment.

2) Secondly, the increase in total value was equally evident in all regions. Only the Atlantic, Quebec and Pacific regions experienced a slight decline in the estimated value in period 8. However, the increased wage and operating costs in the other two regions (Ontario and the Prairies) offset this decline and the overall total for the five regions represented an increase over the preceding period. The decline in total project value in the Atlantic, Quebec and Pacific regions is, however, the result of a much more significant drop in operating costs relative to wages potentially paid. Moreover, salary costs increased during period 8, whereas operating costs were lower.

5.0 CONCLUSIONS

The work carried out by Econosult Inc. for Katimavik consisted in calculating the value of inputs into the Katimavik program and measuring its impact on the Canadian economy.

The approach adopted involved the assignment of the most representative wage rates to the jobs carried out by Katimavik participants. To do so, it was necessary to establish three wage rate scenarios in order to determine as precisely as possible the rate which best represented a particular employment sub-category. Once the appropriate rate was selected, the inputs were evaluated by sub-category and then for the categories overall.

The job descriptions impose certain limits with respect to results obtained, because jobs selected as being similar to a certain project (or employment sub-category) are often, from the point of view of wages, at opposing ends of the wage scale. It is thus necessary to rely on the law of averages. However, there is a large discrepancy between averages. An example of this is sub-category 2.1 where several jobs carried out in a hospital are grouped together in the same category. These types of jobs include, among others, messengers, workers with the handicapped and pharmacy assistants. The wage rates for these three occupations are very different, which makes it all the more difficult to provide an approximation.

Moreover, the selection of scenarios to calculate final results may be questionable in some cases, regardless of the reasons used to justify the scenario selected.

According to the evaluation made, if participants in the Katimavik project had received wages, and if the wages paid had been at current market value, the Katimavik participants would have received more than $33 248 216 in 1984 dollars as remuneration for their efforts.

These potential wages in addition to the $25 458 855 laid out for materials and equipment would have totalled $58 707 071.

Evaluation of the total project value shows a large increase between periods 5-6 and 7-8. In periods 7 and 8 this increase was due, in particular, to a marked increase in weeks worked by Katimavik participants in each of these 2 years. Thus, higher potential wages would have been paid to the participants for years 7 and 8.

The growth in materials and equipment costs was relatively high between years 5 and 7, but these costs dropped in year 8.

In addition, weeks worked were largely concentrated in work categories 1.0 (Construction Work) and 3.0 (Parks, Recreation and Civic Development). These two categories accounted for 71% of the weeks worked and 78.7% of the total operationg costs over the four years of the Katimavik program.

ANNEX A

CONSTRUCTION WORK (1.0)

BUILDING (1.1) AND RENOVATIONS (1.2)

i) for each region in Canada
ii) JOB: labourer
iii) SCENARIOS CONSIDERED: Scenarios 1, 2 and 3

Scenario 1 will be considered since the labourer's job appeared in the Labour Canada survey.

Scenario 2 will be considered for the provinces for which wage rate data was obtained.

Scenario 3 will be considered given the lack of experience of the Katimavik participants. The tasks involved in certain projects may have been performed by unskilled workers who would have received the minimum wage.

GENERAL LIGHT BUILDING MAINTENANCE AND REPAIRS (1.3.)

i) for each region in Canada
ii) JOB: maintenance employee
iii) SCENARIOS CONSIDERED: Scenarios 1, 2 and 3

Scenario 1 will be considered since the job appeared in the Labour Canada survey.

Scenario 2 will be considered for the provinces for which wage rate data was obtained.

Scenario 3 will be considered due to the lack of experience of the Katimavik participants and also because certain participants may have been under the supervision of a maintenance employee and may have performed tasks outlined in category 1.3. This would mean that the assitant would earn less than his superior, that is, approximately the minimum wage.

ENERGY CONSERVATION WORK (1.4)

i) for each province
ii) JOB: labourer (more skilled than in 1.1 and 1.2)
iii) SCENARIOS CONSIDERED: scenarios 1 and 2 (for the same reasons as in 1.1 and 1.2)

Scenario 3 was not considered since the labourers who install energy conservation equipment are generally more skilled than labourers who perform general tasks, such as those described in 1.1 and 1.2. The energy conservation labourers are hired by specialized contractors and are paid more than the minimum wage due to the scarcity of such workers.

SOCIAL SERVICE ACTIVITIES - NON-PHYSICAL WORK (2.0)

GENERAL HOSPITAL WORK (2.1)

i) for each province
ii) this sub-section includes 5 types of jobs:

- hospital or nursing home helpers
- hospital messengers
- registration clerks
- assistants helping pharmacists prepare medication
- recreational group leaders

iii) SCENARIOS CONSIDERED

Employees in these types of jobs are generally unionized, which means that wages are set according to collective agreements. Also, within each job category there are various levels; for instance a clerk 1 will earn less than a clerk 2, who in turn will earn less than a clerk 3.

Such a situation leads us to take two scenarios into account, the average regional wage and the base wage for the worker at the lowest level. The lowest level is considered due to the lack of experience of the Katimavik participants. The underlying reasoning is that if these participants had worked under the same conditions, outside the Katimavik program, they would have received the level 1 wage, given their level of experience.

The recreational program leaders, however, are an exception to this rule. If group leaders are put in charge of organizing activities and supervising the workers who are in direct contact with patients, they will be paid according to the prevailing collective agreement. However, those who work directly with the patients in several institutions are voluntary workers. This is why, in the case of recreational program leaders, the base wage will be considered in the high-end scenario and non-remuneration in the low-end scenario.

GENERAL WORK WITH THE ELDERLY, THE HANDICAPPED AND THE DISADVANTAGED

i) for certain urban centres in Canada
ii) JOB: hospital and nursing home helpers
iii) SCENARIOS CONSIDERED: scenarios 2 and 3

Scenario 1 was not considered since this job is not listed in the Labour Canada survey.

For scenarios 2 and 3, the internal policies of the institutions in question are a determining factor. Some nursing homes have generally unskilled unionized employees who receive more than the minimum wage.

In other establishments, however, which are generally much smaller, less skilled labourers, who may earn less than the unionized workers, are used. For this reason, the minimum wage scenario will be applied in this case.

Such general work with the elderly, the handicapped and the disadvantaged is often voluntary.

RESEARCH WORK AND CLERICAL WORK (2.4)

i) for all regions in Canada
ii) JOB: office work
iii) SCENARIOS CONSIDERED: scenarios 1, 2 and 3

Scenario 1 will be considered since this job appeared in the Labour Canada survey.

Scenario 2 will be considered for the provinces for which wage rate data was obtained. The base wage for this job was obtained from municipalities, hospitals, various levels of government and from certain private companies.

Scenario 3 will be considered given the lack of experience of the Katimavik participants and the very general nature of this type of work.

LIBRARY WORK (2.5)

i) for all regions in Canada
ii) JOB: library assistant
iii) SCENARIOS CONSIDERED: scenario 2

Scenario 2 will be applied to the following institutions:

- Minicipalities
- Governments
- Universities

Only scenario 2 will be considered because this job requires a certain level of education, and the salary is normally above minimum wage, even if the assistant has little experience.

ALL OTHER NON-PHYSICAL WORK (2.6)

i) for certain urban centres in Canada
ii) JOBS:

- School workers and tutors; this type of job can be equated to a monitor's or substitute teacher's job.

- Home tutors and school tutors must be differentiated.

People who provide services in the home, such as babysitters or tutors, are not governed by minimum wage legislation. This means that such workers are not guaranteed the minimum wage.

- Jobs which involve organizing exhibits and archives can be equated to the following jobs:

a) counsellors (camps and city parks)
b) participants in a "Summer Canada" project

Student monitors are considered to be tutors.

Babysitting work can be either in a home or at a day-care centre. Working as an assistant in a cafeteria is classified as kitchen aide's work.

iii) SCENARIOS CONSIDERED: scenarios 2 and 3

Scenario 2 will be considered for the following jobs in which the employee works in an institution and not at his place of residence.

- Monitor, subsitute teacher
- Counsellor
- Participants "Summer Canada"
- Work in a day-care centre
- Kitchen aide

When the employee works at his place of residence (monitor, day-care worker), he is not legally permitted to collect even the minimum wage. For this reason, we will consider scenario 3, and even the possibility of volunteer work for such employees.

PARKS, RECREATION AND CIVIC DEVELOPMENT (3.0)

TRAIL CLEARING, SKI TRAILS, SIDEWALKS, ACCESS ROADS/RAMPS AND HABITAT/CAMPGROUND IMPROVEMENT AND DEVELOPMENT (3.1 and 3.2)

i) for certain urban regions of Canada

ii) JOB:
- maintenance employee in a national or provincial park
- labourer in a municipality or for the provincial highways department

iii) SCENARIOS CONSIDERED: 1 and 2

Scenario 1 is retained since the position of labourer is recognized by the Labour Canada survey, whereas the position of park maintenance worker is not.

Scenario 2 will be considered for the provincial and federal governments.

Scenario 3 is not applicable here, because the positions in question are government positions and maintenance employees in national parks could be elligible for an isolation premium, which would be included in their wages. Moreover, municipal labourers generally earn more than the minimum wage.

RIVER AND STREAM CLEANING (3.3)

i) certain regions of Canada
ii) JOB:
  - student "Summer Canada" employment, for shoreline and bank reconstruction
  - labourer for the federal, provincial or municipal governments in shoreline redevelopment projects
iii) SCENARIOS CONSIDERED: 2 and 3

Scenario 2 is considered for the different levels of government.

Scenario 3 applies to wages of students hired to rebuild shoreline banks. Some of these students receive the minimum wage allocated by the provincial and federal governments. Others receive $160 per week, the same wage as students participating in "Summer Canada" projects.

GENERAL CLEAN UP AND MAINTENANCE ACTIVITIES (3.4)

i) for all regions of Canada
ii) JOB:
  - labourer in a municipality or for a landscaping contractor
  - maintenance worker for a golf club
iii) SCENARIOS CONSIDERED: scenarios 1, 2 and 3

Scenario 1 will be considered since the position of labourer is recognized by the Labour Canada survey.

Scenarios 2 and 3 will be considered for the two types of positions.

Certain labourers responsible for lawn maintenance for private citizens are paid the minimum hourly wage or a lump-sum payment lower than the base wage for a municipal labourer.

Golf course maintenance workers are generally paid less than the base wage earned by municipal labourers unless the golf club is city property. Thus, those responsible for greens maintenance are paid at the same rate as municipal labourers.

SURVEYING (3.5)

i) for certain regions of Canada
ii) JOB: chainman or surveyor's assistant
iii) SCENARIOS CONSIDERED: scenarios 2 and 3

Scenario 2 will be considered for the base wage of chainmen employed by the municipal, provincial and federal governments and by certain private firms.

Scenario 3 will be considered if the employee is a student working as a chainman. Some of these positions pay slightly more than the minimum wage.

TOURISM DEVELOPMENT/INFORMATION (3.6)

i) for certain regions of Canada
ii) JOB:
  - information agent
  - information and administrative technician
  - museum guide
  - special events organizer
iii) SCENARIOS CONSIDERED: scenarios 2 and 3

Scenario 2 will be considered for the first two types of jobs, that is, information agent and administrative technician. Museum guide jobs in numerous museums are unpaid.

The special events organizer is generally employed by a municipality or a provincial or federal government. Generally, only organizers for government institutions are paid for their services. Other organizers (of a neighbourhood event, for example) are not paid.

Wages earned by organizers at different levels of government can correspond either to wages earned by participants in "Summer Canada" projects or to wages earned by information agents as well as information or administrative technicians employed by provincial or municipal governments.

Scenario 3 will thus apply to participants working in "Summer Canada" projects.

GENERAL WORK IN A MUNICIPALITY (3.7)

i) for each region in Canada
ii) JOB: municipal labourer
iii) SCENARIOS CONSIDERED: scenarios 1, 2 and 3

Scenario 1 will be considered since the position of labourer is included in the Labour Canada survey.

Scenario 2 will be considered for wages paid by municipalities and governments (highways).

Scenario 3 will be considered in cases where a project might be abandoned if there were no one to do it at lower wages than generally paid. This situation occurs particularly in rural regions.

SILVICULTURE (4.0)

TREE PLANTING (4.1)

i) for certain regions of Canada
ii) POSITION: tree planter
iii) SCENARIOS CONSIDERED: scenario 2

In view of the characteristics of this type of employment, only scenario 2 is applicable. Workers hired to plant trees are employed either by private contractors or by the government. Wage rates set according to the number of trees planted in a day are generally applicable to this type of work.

An experienced worker may thus earn more than an inexperienced worker in that he will probably plant more trees in a day and the quality of planting will probably be higher.

GENERAL NURSERY WORK (4.2 to 4.5)

The type of work described in 4.2 is general nursery work either outdoors or inside a nursery or greenhouse. This work can be performed for a private establishment (administrative offices, nurseries, greenhouses), municipalities or a public institution (school, administrative offices, governments, etc.)

i) certain regions of Canada
ii) JOB: gardener, nursery work
iii) SCENARIOS CONSIDERED: scenarios 1, 2 and 3

Scenario 1 is considered since this type of position is listed in the Labour Canada survey.

Scenario 2 is considered since certain organizations questioned required gardeners.

Scenario 3 will be considered because certain private nurseries pay their unskilled employees wages that are closer to the minimum wage than to the base wage paid by the government, for example.

ARCHEOLOGICAL WORK (5.1 to 5.4)

i) for each region in Canada
ii) JOB: research assistant
iii) SCENARIO CONSIDERED: scenarios 2 and 3

Scenario 1 is not considered since this occupation is not listed in the Labour Canada survey.

Scenario 2 is considered because the job of research assistant can be filled either by students or lower management staff in certain private companies and in public administration.

Scenario 3 may be considered if the research assistants do not require any particular qualifications to perform the required tasks, for example, certain land excavation jobs, renovation work or maintenance of museums or historical sites.

MISCELLANEOUS WORK (6.0)

WORK IN A CEMETERY (6.1)

i) for all Canadian regions
ii) JOB: cemetery maintenance worker
iii) SCENARIOS CONSIDERED: 1, 2 and 3

Scenario 1 is applicable if maintenance work as listed in the Labour Canada survey corresponds to cemetery maintenance work.

Scenario 2 applies to fairly large cemeteries, from which the wage rates for maintenance workers are more likely to be available.

Scenario 3 was considered for small cemeteries. This rate corresponds to the minimum amount paid to this type of worker.

RECYCLING (6.2)

i) for each region in Canada
ii) JOB: recovery and recycling of products
iii) SCENARIOS CONSIDERED: 1, 2 and 3 (no remuneration)

Scenarios 2 and 3 (with remuneration) are at the same level since inexperienced workers assigned to product recycling tasks generally receive the minimum wage.

Scenario 3 (no remuneration) was also considered when the employee's job involved only recovery work. Certain recovery tasks are performed by volunteer workers.

GENERAL CLERICAL WORK (6.3)

i) for each region in Canada
ii) JOB: office work (clerk, receptionist, messenger)
iii) SCENARIOS CONSIDERED: 1, 2 and 3

The three scenarios are considered in view of the work environment (private, public, unionized, non-unionized), the complexity of tasks performed, the type of job assigned (clerk, receptionist messenger) and competency level (experienced, somewhat experienced and inexperienced).

PHYSICAL WORK FOR THE PARISH/CHURCH (6.4)

i) for each region in Canada
ii) JOB: church maintenance
iii) SCENARIOS CONSIDERED: 2 and 3

When workers are hired full time or by contract, their remuneration is higher than the minimum wage. However, many tasks can be performed by parishioners who either volunteer their services or earn low wages.

TABLE B-1

ORIGIN OF WAGE RATES USED FOR SCENARIO 2
(CONVERTED IN WEEKLY RATES)

OCCUPATIONS	WAGE RATE IN						
	PRIVATE SECTOR (1)	PUBLIC HOSPITALS		GOUVERNMENT		MISCELLANEOUS (4)	MUNICIPALITIES (5) (MONTREAL)
		QUEBEC	ONTARIO (2)	QUEBEC (3)	ONTARIO (2)		
1. labourer	476.63	300.51	345.20	361.15	345.20		461.60
2. janitor			305.20	341.78	305.20		461.60
3. hospital helper		300.51	333.20				
4. work with the handicapped						MIN. WAG.	
5. cook assistant	240.00	378.98	329.20	341.78	329.20		
6. responsible for recreative activities (hospital)		336.00		290.15			
7. messenger	172.50	290.15	245.20	291.15	245.20		265.17
8. receptionist	248.63	291.90	286.65	292.90	286.65		278.02
9. office clerk	206.25	290.15	286.65	293.96	286.65		265.17
10. responsible for recreative activities (playground)							262.52
11. maintenance activities (playground)							5.60(1)
12. tree and plant maintenance							461.60
13. gardener				397.58	396.80	350.	535.20
14. daycare work	240.00						
15. maintenance (National Park)				419.66			
16. assistant surveyor	225.00			297.37	272.48		292.29
17. information agent				315.04	290.15		
18. museum guide						VOLUNTEER WORK	
19. "Summer Canada program" participant						160$	
21. tree planting				625.00			
22. research assistance				337.15		300.	
23. recycling activities						MIN. WAG.	
24. maintenance activities (church)						259.52	
25. library technician	296.25			337.15	273.07		

Notes: (1) For a work week of 37.5 hours.
(2) For a work week of 40 hours.
(3) For occupations 1, 2, 5, 13, 14, the work week corresponds to 38.75 hours. For all other occupations, the work week is 35 hours.
(4) Cimetery, universities, recycling industry, church.
(5) For occupations 1, 12, 13, the work week corresponds to 40 hours. For all other occupations, the work week is 35 hours.

TABLE B-2.1

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TOTAL COSTS IN WAGES, AND FOR MATERIALS AND EQUIPMENT, BY REGION AND WORK CATEGORY, FOR YEAR 5

WORK CATEGORY	ATLANTIC		QUEBEC		ONTARIO		PRAIRIES		PACIFIC	
	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.
1.0 CONSTRUCTION WORK										
1.1 Building	312 113	103 330	117 996	144 369	-	-	88 499	162 452	180 593	110 510
1.2 Renovations	63 309	74 216	140 550	171 091	83 948	54 191	81 254	68 494	87 466	201 174
1.3 General light building maintenance and repairs	10 152	0	37 200	18 400	7 380	20 000	28 944	36 846	9 855	12 920
1.4 Energy conservation work	-	-	-	-	-	-	-	-	-	-
SUB TOTAL 1.0	385 574	177 546	295 746	325 860	91 328	74 191	198 697	267 792	277 914	324 604
2.0 SOCIAL SERVICE ACTIVITIES NON PHYSICAL WORK										
2.1 General hospital work									35 614	0
2.2 General work with the elderly, the handicapped and the disadvantaged	0	0	0	21 865	0	3 397	0	0	0	38 320
2.3 Referral services										
2.4 Research work, clerical work	11 632	0			8 731	0	17 552	3 700	21 452	4 741
2.5 Library work										
2.6 All other non-physical work	56 964	18 600	10 350	10 845	63 499	4 630	67 536	8 200	56 121	20 588
SUB TOTAL 2.0	68 596	18 600	10 350	32 710	72 230	8 027	85 088	11 900	113 187	63 649

TABLE B.2.1

(Page 2 of 4)

TOTAL COSTS IN WAGES, AND FOR MATERIALS AND EQUIPMENT, BY REGION AND WORK CATEGORY, FOR YEAR 5

WORK CATEGORY	ATLANTIC		QUEBEC		ONTARIO		PRAIRIES		PACIFIC	
	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.
3.0 PARKS, RECREATION AND CIVIC DEVELOPMENT										
3.1 Trail clearing, ski trails, sidewalks, access road/ramps	31 229	6 000	54 975	24 275	69 093	11 330				
3.2 Habitat/campground improvement and development	141 846	91 799	198 000	220 744	132 840	110 815	204 719	214 829	95 816	88 565
3.3 River and stream cleaning					2 460	0			3 285	6 100
3.4 General clean up and maintenance	7 938	0	21 000	16 890	19 548	1 130	34 330	36 240	10 155	8 330
3.5 Surveying										
3.6 Tourism development/information	33 736	8 750	78 130	23 250	13 927	8 750	47 422	28 300	43 690	15 800
3.7 General work in a municipality			13 247	330	117 502	133 595	73 757	33 510	20 843	136 650
SUB TOTAL 3.0	214 749	106 549	365 352	283 489	355 370	265 620	360 228	312 879	173 789	255 445

TABLE B.2.1

(Page 3 of 4)

TOTAL COSTS IN WAGES, AND FOR MATERIALS AND EQUIPMENT, BY REGION AND WORK CATEGORY, FOR YEAR 5

WORK CATEGORY	ATLANTIC		QUEBEC		ONTARIO		PRAIRIES		PACIFIC	
	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.
4.0 SILVICULTURE										
4.1 Tree planting										
4.2 to 4.5 General nursery work										
4.2										
4.3										
4.4					39 528	24 200				
4.5			66 155	20 065					22 509	14 800
SUB TOTAL 4.0	0	0	66 155	20 065	39 528	24 200	0	0	22 509	14 800
5.0 ARCHEOLOGICAL WORK										
5.1 Archeological field work										
5.2 Restoration work					25 033	15 900				
5.3 Research, lab. work										
5.4 Work at museum or historical site					46 214	27 550	12 134	170	36 001	135 000
SUB TOTAL 5.0	0	0	0	0	71 247	43 450	12 134	170	36 001	135 000

TABLE B2.1

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TOTAL COSTS IN WAGES, AND FOR MATERIALS AND EQUIPMENT, BY REGION AND WORK CATEGORY, FOR YEAR 5

WORK CATEGORY	ATLANTIC		QUEBEC		ONTARIO		PRAIRIES		PACIFIC	
	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.
6.0 MICELLANEOUS										
6.1 Work in cemetery										
6.2 Recycling									6 570	0
6.3 General clerical work (non social)									27 651	8 075
6.4 Physical work for the parish/church			28 558	3 683						
SUB TOTAL 6.0	0	0	28 558	3 683	0	0	0	0	34 221	8 075
TOTAL	668 919	302 695	766 161	673 807	629 703	415 488	656 147	592 741	657 621	801 573
GRAND TOTAL (WAGES + MATERIALS AND EQUIPMENT)	Wages + Operation costs (materials and equipment) 3 378 551 $ + 2 786 304 $ = 6 164 855 $									

TABLE B-2.2

(Page 1 of 4)

TOTAL COSTS IN WAGES, AND FOR MATERIALS AND EQUIPMENT, BY REGION AND WORK CATEGORY, FOR YEAR 6

WORK CATEGORY	ATLANTIC		QUEBEC		ONTARIO		PRAIRIES		PACIFIC	
	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.
1.0 CONSTRUCTION WORK										
1.1 Building	263 697	106 163	186 433	136 308	-	-	165 485	97 288	142 525	33 725
1.2 Renovations	49 632	59 000	196 650	236 124	97 170	193 524	53 064	34 272	47 224	27 232
1.3 General light building maintenance and repairs	10 152	8 500	6 750	130	3 690	0	23 366	316 230	10 950	17 320
1.4 Energy conservation work	-	-	-	-	-	-	-	-	-	-
SUB TOTAL 1.0	323 481	173 663	389 833	372 562	100 860	193 524	241 915	447 790	200 699	78 277
2.0 SOCIAL SERVICE ACTIVITIES NON PHYSICAL WORK										
2.1 General hospital work	41 832	14 120	7 273	18 810	-	-	7 746	19 500	-	-
2.2 General work with the elderly, the handicapped and the disadvantaged	0	11 580	0	16 400	0	52 297	0	24 230	0	5 600
2.3 Referral services	-	-	-	-	-	-	-	-	-	-
2.4 Research work, clerical work	45 316	12 400	37 945	33 511	5 729	0	13 164	47 300	-	-
2.5 Library work	16 545	1 500	22 789	6 902	10 923	0	25 038	2 541	7 533	0
2.6 All other non-physical work	33 840	22 100	4 950	3 740	62 730	50 700	93 917	124 937	93 763	54 255
SUB TOTAL 2.0	137 533	61 700	72 957	79 363	79 382	102 997	139 865	218 508	101 296	59 855

TABLE B.2.2

(Page 2 of 4)

TOTAL COSTS IN WAGES, AND FOR MATERIALS AND EQUIPMENT, BY REGION AND WORK CATEGORY, FOR YEAR 6

WORK CATEGORY	ATLANTIC		QUEBEC		ONTARIO		PRAIRIES		PACIFIC	
	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.
3.0 PARKS, RECREATION AND CIVIC DEVELOPMENT										
3.1 Trail clearing, ski trails, sidewalks, access road/ramps	50 652	1 630	101 977	18 364	49 352	15 750	-	-	34 981	0
3.2 Habitat/campground improvement and development	236 175	140 643	268 050	342 738	215 096	424 310	180 900	208 365	251 312	595 381
3.3 River and stream cleaning					3 285	6 040				
3.4 General clean up and maintenance	-	-	7 140	3 200	8 530	0	23 829	12 670	18 025	40 790
3.5 Surveying			4 063	1 600						
3.6 Tourism development/ information	-	-	70 569	27 055	20 891	6 615	25 583	23 565	8 004	0
3.7 General work in a municipality	29 183	16 500	62 921	16 375	58 598	13 500	68 989	37 418	-	-
SUB TOTAL 3.0	316 010	158 773	514 720	409 332	355 752	466 215	299 301	282 018	312 322	636 171

TABLE B.2.2

(Page 3 of 4)

TOTAL COSTS IN WAGES, AND FOR MATERIALS AND EQUIPMENT, BY REGION AND WORK CATEGORY, FOR YEAR 6

WORK CATEGORY	ATLANTIC		QUEBEC		ONTARIO		PRAIRIES		PACIFIC	
	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.
4.0 SILVICULTURE										
4.1 Tree planting	-	-	-	-	-	-	-	-	-	-
4.2 General nursery work to 4.5										
4.2							79 056	480 000		
4.3										
4.4					98 820	43 000				
4.5	13 176	13 000					10 980	58 914	6 588	5 400
SUB TOTAL 4.0	13 176	13 000	0	0	98 820	43 000	90 036	538 914	6 588	5 400
5.0 ARCHEOLOGICAL WORK										
5.1 Archeological field work					40 438	0				
5.2 Restoration work	-	-	-	-	39 475	1 900	40 438	4 000	8 471	24 000
5.3 Research, lab. work	-	-	-	-	3 851	0	-	-	28 589	46 020
5.4 Work at museum or historical site	-	-	-	-	30 810	33 595	-	-	41 824	23 911
SUB TOTAL 5.0	0	0	0	0	114 574	35 495	40 438	4 000	78 884	93 931

TABLE B2.2

(Page 4 of 4)

TOTAL COSTS IN WAGES, AND FOR MATERIALS AND EQUIPMENT, BY REGION AND WORK CATEGORY, FOR YEAR 6

WORK CATEGORY	ATLANTIC		QUEBEC		ONTARIO		PRAIRIES		PACIFIC	
	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.
6.0 MICELLANEOUS										
6.1 Work in cemetery										
6.2 Recycling	-	-	24 450	27 724	-	-	-	-	9 855	1 000
6.3 General clerical work (non social)										
6.4 Physical work for the parish/church	11 231	0	33 231	5 585	-	-	-	-	-	-
SUB TOTAL 6.0	11 231	0	57 681	33 309	0	0	0	0	9 855	1 000
TOTAL	801 431	407 136	1 035 191	894 566	749 388	841 231	811 555	1 491 230	709 644	871 614
GRAND TOTAL (WAGES + MATERIALS AND EQUIPMENT)	Wages + Operation costs (materials and equipment) 4 107 209 $ + 4 508 797 $ = 8 616 006 $									

TABLE B-2.3

(Page 1 of 4)

TOTAL COSTS IN WAGES, AND FOR MATERIALS AND EQUIPMENT, BY REGION AND WORK CATEGORY, FOR YEAR 7

WORK CATEGORY	ATLANTIC		QUEBEC		ONTARIO		PRAIRIES		PACIFIC	
	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.
1.0 CONSTRUCTION WORK										
1.1 Building	702 177	348 354	914 297	980 823	266 139	101 475	361 909	215 611	418 289	345 870
1.2 Renovations	106 596	39 649	499 350	900 795	226 013	348 720	278 285	219 084	78 022	111 770
1.3 General light building maintenance and repairs	14 664	0	45 600	20 229	75 645	77 640	79 747	16 500	3 559	0
1.4 Energy conservation work	7 308	1 250	23 262	32 250	-	-	-	-	-	-
SUB TOTAL 1.0	830 745	389 253	1 482 509	1 934 097	567 797	527 835	719 941	451 195	499 870	457 640
2.0 SOCIAL SERVICE ACTIVITIES NON PHYSICAL WORK										
2.1 General hospital work	-	-	13 383	0	100 312	4 500	87 793	81 800	8 814	0
2.2 General work with the elderly, the handicapped and the disadvantaged	0	21 900	0	41 972	0	143 344	0	69 902	0	34 045
2.3 Referral services	-	-	-	-	-	-	7 839	0	-	-
2.4 Research work, clerical work	11 874	3 500	99 506	17 557	24 828	15 037	48 894	15 389	38 306	2 683
2.5 Library work	7 681	0	38 740	2 830	33 041	11 400	20 343	0	5 650	0
2.6 All other non-physical work	46 389	38 230	160 200	69 180	247 845	110 906	189 493	114 525	159 465	42 825
SUB TOTAL 2.0	65 044	63 630	311 829	131 539	406 026	285 187	354 362	281 616	212 235	79 553

TABLE B.2.3

(Page 2 of 4)

TOTAL COSTS IN WAGES, AND FOR MATERIALS AND EQUIPMENT, BY REGION AND WORK CATEGORY, FOR YEAR 7

WORK CATEGORY	ATLANTIC		QUEBEC		ONTARIO		PRAIRIES		PACIFIC	
	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.
3.0 PARKS, RECREATION AND CIVIC DEVELOPMENT										
3.1 Trail clearing, ski trails, sidewalks, access road/ramps	143 196	34 100	101 138	35 075	419 495	80 670	114 980	11 575	74 690	6 806
3.2 Habitat/campground improvement and development	651 420	368 765	809 550	1 130 154	421 121	481 906	618 378	627 391	386 138	174 987
3.3 River and stream cleaning	-	-	7 200	6 957	-	-	-	-	27 924	24 500
3.4 General clean up and maintenance	96 957	19 400	72 870	68 553	59 533	45 130	153 071	101 628	137 344	47 976
3.5 Surveying	-	-	-	-	-	-	-	-	-	-
3.6 Tourism development/ information	-	-	297 713	93 754	186 566	136 715	44 927	12 100	117 062	3 150
3.7 General work in a municipality	99 298	18 770	231 815	154 765	439 793	394 254	224 452	72 201	27 915	0
SUB TOTAL 3.0	990 871	441 035	1 520 286	1 489 258	1 526 508	1 138 675	1 155 808	824 895	771 073	257 419

TABLE B.2.3

(Page 3 of 4)

TOTAL COSTS IN WAGES, AND FOR MATERIALS AND EQUIPMENT, BY REGION AND WORK CATEGORY, FOR YEAR 7

WORK CATEGORY	ATLANTIC		QUEBEC		ONTARIO		PRAIRIES		PACIFIC	
	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.
4.0 SILVICULTURE										
4.1 Tree planting			6 875	120					24 375	0
4.2 to 4.5 General nursery work										
4.2	14 000	5 985	4 392	410	-	-	-	-	14 274	0
4.3	-	-	-	-	57 096	17 078	-	-	-	-
4.4										
4.5	21 411	11 070	-	-	85 095	54 030	57 096	29 165	57 096	10 850
SUB TOTAL 4.0	35 411	17 055	11 267	530	142 191	71 108	57 096	29 165	95 745	10 850
5.0 ARCHEOLOGICAL WORK										
5.1 Archeological field work					50 066	0				
5.2 Restoration work										
5.3 Research, lab. work									15 618	38 000
5.4 Work at museum or historical site	67 728	14 160	12 687	3 727	171 138	300 226	9 100	5 010	62 472	100 000
SUB TOTAL 5.0	67 728	14 160	12 687	3 727	221 204	300 226	9 100	5 010	78 090	138 000

TABLE B2.3

TOTAL COSTS IN WAGES, AND FOR MATERIALS AND EQUIPMENT, BY REGION AND WORK CATEGORY, FOR YEAR 7

WORK CATEGORY	ATLANTIC		QUEBEC		ONTARIO		PRAIRIES		PACIFIC	
	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.
6.0 MICELLANEOUS										
6.1 Work in cemetery			5 400	2 400						
6.2 Recycling			38 550	10 261					28 471	28 000
6.3 General clerical work (non social)	14 571	830	27 942	1 510	53 309	15 250	41 474	18 955	27 984	0
6.4 Physical work for the parish/church	14 400	100	84 117	30 678	-	-	23 328	0		
SUB TOTAL 6.0	29 011	930	156 009	44 849	53 309	15 250	64 802	18 955	56 455	28 000
TOTAL	2 019 710	926 063	3 494 587	3 604 000	2 917 035	2 338 281	2 361 109	1 610 109	1 713 468	971 462
GRAND TOTAL (WAGES + MATERIALS AND EQUIPMENT)	Wages + Operation costs (materials and equipment) 12 505 909 $ + 9 450 642 $ = 21 956 551 $									

TABLE B-2.4

(Page 1 of 4)

TOTAL COSTS IN WAGES, AND FOR MATERIALS AND EQUIPMENT, BY REGION AND WORK CATEGORY, FOR YEAR 8

WORK CATEGORY	ATLANTIC		QUEBEC		ONTARIO		PRAIRIES		PACIFIC	
	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.
1.0 CONSTRUCTION WORK										
1.1 Building	901 016	365 360	894 069	959 184	324 235	221 194	578 838	558 681	168 987	95 332
1.2 Renovations	172 584	171 258	538 350	554 404	282 131	209 090	293 963	396 417	51 193	38 960
1.3 General light building maintenance and repairs	35 814	2 790	52 050	23 775	121 770	48 814	66 029	45 805	25 870	36 500
1.4 Energy conservation work	-	-	-	-	-	-	2 878	525	-	-
SUB TOTAL 1.0	1 109 414	539 408	1 484 469	1 537 363	728 136	479 098	941 708	1 001 428	246 050	170 792
2.0 SOCIAL SERVICE ACTIVITIES NON PHYSICAL WORK										
2.1 General hospital work	-	-	35 493	0	89 924	495	154 607	251 600	-	-
2.2 General work with the elderly, the handicapped and the disadvantaged	0	800	0	6 050	0	165 511	0	113 413	0	60 800
2.3 Referral services	-	-	-	-	-	-	-	-	-	-
2.4 Research work, clerical work	5 574	0	208 830	19 465	85 123	18 484	61 117	52 850	37 080	2 350
2.5 Library work	-	-	34 834	820	13 927	496	23 995	2 200	8 161	0
2.6 All other non-physical work	37 647	8 000	169 950	106 632	266 628	33 140	184 820	141 167	160 013	397 369
SUB TOTAL 2.0	43 221	8 800	449 107	132 967	415 602	218 126	424 539	561 230	205 254	460 519

TABLE B.2.4

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TOTAL COSTS IN WAGES, AND FOR MATERIALS AND EQUIPMENT, BY REGION AND WORK CATEGORY, FOR YEAR 8

WORK CATEGORY	ATLANTIC		QUEBEC		ONTARIO		PRAIRIES		PACIFIC	
	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.
3.0 PARKS, RECREATION AND CIVIC DEVELOPMENT										
3.1 Trail clearing, ski trails, sidewalks, access road/ramps	158 429	1 000	113 728	24 510	350 402	182 990	61 470	6 690	49 636	7 500
3.2 Habitat/campground improvement and development	195 003	46 591	643 050	492 594	697 410	845 931	356 675	289 563	92 394	48 706
3.3 River and stream cleaning	-	-	15 900	3 500	63 960	32 500	19 899	19 100	-	-
3.4 General clean up and maintenance	26 460	0	88 620	42 109	209 520	84 935	143 377	40 800	118 811	44 300
3.5 Surveying	-	-	-	-	-	-	-	-	-	-
3.6 Tourism development/ information	-	-	199 420	48 300	226 897	65 470	99 525	21 642	226 897	53 765
3.7 General work in a municipality	59 503	0	555 620	221 661	129 405	14 100	253 382	175 867	112 032	5 000
SUB TOTAL 3.0	439 395	47 591	1 616 338	832 674	1 677 594	1 225 926	934 328	553 662	599 770	159 271

TABLE B.2.4

(Page 3 of 4)

TOTAL COSTS IN WAGES, AND FOR MATERIALS AND EQUIPMENT, BY REGION AND WORK CATEGORY, FOR YEAR 8

WORK CATEGORY	ATLANTIC		QUEBEC		ONTARIO		PRAIRIES		PACIFIC	
	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.
4.0 **SILVICULTURE**										
4.1 Tree planting	-	-	333 750	1 500	248 125	82 935	60 000	22 377	130 000	29 300
4.2 to 4.5 General nursery work										
4.2	-	-	-	-	19 215	0	14 274	2 815	42 822	0
4.3	-	-	-	-	57 096	29 000	-	-	-	-
4.4	57 096	0	43 920	20 342	90 311	24 650	-	-	57 096	81 500
4.5	-	-	26 901	75 300	20 862	8 450	8 784	0	41 724	13 500
SUB TOTAL 4.0	57 096	0	404 571	97 142	435 609	145 035	83 058	25 192	271 642	124 300
5.0 **ARCHEOLOGICAL WORK**										
5.1 Archeological field work	-	-	-	-	64 508	0	-	-	18 265	20 200
5.2 Restoration work	-	-	9 271	0	-	-	-	-	55 060	35 300
5.3 Research, lab. work	-	-	-	-	14 442	30 800	-	-	-	-
5.4 Work at museum or historical site	1 144	0	-	-	140 810	87 800	3 033	0	34 412	61 700
SUB TOTAL 5.0	1 144	0	9 271	0	219 760	118 600	3 003	0	107 737	117 200

TABLE B-2.4

(Page 4 of 4)

TOTAL COSTS IN WAGES, AND FOR MATERIALS AND EQUIPMENT, BY REGION AND WORK CATEGORY, FOR YEAR 8

WORK CATEGORY	ATLANTIC		QUEBEC		ONTARIO		PRAIRIES		PACIFIC	
	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.	WAGES	MAT.& EQUIP.
6.0 MICELLANEOUS										
6.1 Work in cemetery	-	-	3 600	17 000	21 218	15 000	23 517	18 400	-	-
6.2 Recycling	29 328	24 065	14 850	0	50 738	43 825	-	-	30 798	0
6.3 General clerical work (non social)	-	-	31 013	800	48 866	24 646	-	-	28 983	8 000
6.4 Physical work for the parish/church	39 309	0	26 481	5 052	-	-	-	-	-	-
SUB TOTAL 6.0	68 637	24 065	75 944	22 852	120 822	83 471	23 517	18 400	59 781	8 000
TOTAL	1 718 907	619 864	4 039 700	2 622 998	3 597 523	2 270 256	2 410 183	2 159 912	1 450 234	1 040 082
GRAND TOTAL (WAGES + MATERIALS AND EQUIPMENT)	Wages + Operation costs (materials and equipment) 13 256 547 + 8 713 112 $ = 21 969 659 $									

TABLE B-3:AVERAGE WORK WEEKS BY REGION,PER YEAR.

KATYEAR	REGION	CATEGORY	PARTWW	SPONCOST	SUM. PARTWW	SUM. SPONCOST	AVG. REGION PARTWW	AVG. YEAR PARTWW
5	1	2.6	404	18600				
5	1	1.2	449	74216				
5	1	2.5	4	0				
5	1	3.6	118	8750				
5	1	2.4	48	0				
5	1	3.2	1006	91799				
5	1	2.2	152	0				
5	1	1.1	1025	103330				
5	1	3.1	82	6000				
5	1	3.4	42	0				
5	1	1.3	72	0			3402	
5	2	3.2	1320	213580				
5	2	3.7	36	330				
5	2	2.2	93	21865				
5	2	1.1	350	139205				
5	2	1.3	248	18400				
5	2	2.5	86	10328				
5	2	4.5	241	20065	5776	726468		
5	2	3.6	248	23250				
5	2	2.6	69	10845				
5	2	6.4	110	3683				
5	2	1.2	937	171091				
5	2	3.4	100	16890				
5	2	3.1	131	24275			3969	
5	3	4.4	144	24200				
5	3	3.7	385	133595				
5	3	1.3	48	20000				
5	3	2.6	413	4630				
5	3	5.4	192	27550				
5	3	3.4	110	1130				
5	3	2.4	32	0				
5	3	5.2	104	15900				
5	3	3.1	168	11330				
5	3	2.1	120	0				
5	3	3.2	864	110815				
5	3	3.6	48	8750				
5	3	1.2	546	54191				
5	3	3.3	16	0	4785	662125		
5	3	2.2	275	3397			3465	

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KATYEAR REGION  CATEGORY PARTWW  SPONCOST SUM.PTW SUM.SPC AV.RG.PW AV.YR.PW

5        4       1.1        246    162452
5        4       3.6        152     28300
5        4       2.4         56      3700
5        4       3.4        170     36240
5        4       1.2        539     68494
5        4       3.7        232     33510
5        4       2.2         24         0
5        4       1.3        192     36846
5        4       5.4         48       170
5        4       2.6        448      8200
5        4       3.2       1358    214829                     3465
5        5       3.6        131     15800
5        5       6.3         83      8075
5        5       3.3         24      6100
5        5       3.2        700     88565
5        5       1.1        389    110510
5        5       1.3         72     12920
5        5       2.4         70      4741
5        5       5.4        136    135000    5345  977849
5        5       1.2        639    201174
5        5       6.2         48         0
5        5       3.4         40      8330     727  209504
5        5       4.5         82     14800
5        5       2.2        144     38320
5        5       2.6        410     20588
5        5       3.7         56    136650                     3024    17325
6        1       2.1        168     14120
6        1       4.5         48     13000
6        1       2.2        137     11580
6        1       6.4         42         0
6        1       3.7         77     16500
6        1       2.6        240     22100
6        1       3.2       1675    140643
6        1       1.2        352     59000
6        1       1.3         72      8500
6        1       3.1        133      1630
6        1       2.5         56      1500
6        1       1.1        866    106163
6        1       2.4        187     12400                     4053
6        2       1.3         45       130
6        2       3.4         34      3200
6        2       2.2        116     16400
6        2       2.6         33      3740
6        2       2.5         70      6902
6        2       2.1         25     18810
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KATYEAR REGION  CATEGORY PARTWW  SPONCOST SUM.PTW SUM.SPC AV.RG.PW AV.YR.PW


6        2     6.4         128       5585
6        2     1.2        1311     236124
6        2     3.7         171      16375
6        2     3.1         243      18364
6        2     6.2         163      27724
6        2     3.5          15       1600
6        2     1.1         553     136308
6        2     3.2        1787     342738
6        2     3.6         224      27055
6        2     2.4         143      33511                    5061
6        3     5.1         168          0
6        3     4.4         360      43000
6        3     5.4         128      33595
6        3     2.2         408      52297
6        3     5.3          16          0
6        3     2.5          40          0
6        3     5.2         164       1900
6        3     3.2        1399     427330
6        3     3.4          48          0
6        3     3.7         192      13500
6        3     1.2         632     196544
6        3     1.3          24          0
6        3     2.4          21          0
6        3     2.6         408      50700
6        3     3.1         120      15750
6        3     3.6          72       6615                    4200
6        4     3.2        1200     206365
6        4     1.2         352      34272
6        4     1.1         460      97288
6        4     2.2         379      24230
6        4     3.6          82      23565
6        4     3.4         118      12670
6        4     4.5          40      58914
6        4     2.4          42      47300
6        4     2.5          96       2541
6        4     4.2         288     480000
6        4     1.3         155     316230
6        4     2.6         623     124937
6        4     2.1          24      19500
6        4     5.2         168       4000
6        4     3.7         217      37418                    4244
6        5     3.6          24          0
6        5     5.4         158      23911
6        5     1.3          80      17320
6        5     1.1         307      32215
```

```
KATYEAR REGION  CATEGORY PARTWW  SPONCOST SUM.PTW SUM.SPC AV.RG.PW AV.YR.PW


6       5       3.2        1836    592361
6       5       2.6         685     54255
6       5       3.3          24      6040
6       5       4.5          24      5400
6       5       2.5          24         0
6       5       1.2         345     25722
6       5       3.1          74         0
6       5       6.2          72      1000
6       5       5.3         108     46020
6       5       2.2         336      5600
6       5       3.4          71     40790
6       5       5.2          32     24000                     4200    21758
7       1       6.3          52       830
7       1       4.4          78     11070
7       1       1.4          24      1250
7       1       2.2         439     21900
7       1       2.4          49      3500
7       1       1.3         104         0
7       1       4.2          51      5985
7       1       1.1        2306    333995
7       1       3.4         513     19400
7       1       3.2        4620    354407
7       1       4.5         289     28717
7       1       6.4          54       100
7       1       3.7         262     18770
7       1       2.5          26         0
7       1       3.1         376     34100
7       1       5.4         296     14160
7       1       1.2         756     39649
7       1       2.6         329     38230                    10624
7       2       2.1          46         0
7       2       2.6        1068     69180
7       2       3.6         945     93754
7       2       3.1         241     35075
7       2       1.1        2712    980823   14890 2066345
7       2       6.1          36      2400
7       2       1.4          69     32250
7       2       3.4         347     68553
7       2       2.2         831     41972
7       2       6.2         257     10261
7       2       4.5          21      2265
7       2       1.3         304     20229
7       2       6.4         324     30678
7       2       6.3          91      1510
7       2       2.5         119      2830
```

```
KATYEAR REGION  CATEGORY PARTNW  SPONCOST SUM.PTW SUM.SPC AV.RG.PW AV.YR.PW


7       2     4.1            11       120
7       2     3.7           630    154765
7       2     3.2          5397   1129022
7       2     2.4           375     17557
7       2     1.2          3329    899662
7       2     4.2            16       410
7       2     5.4            52      3727
7       2     3.3            48      6957                        17269
7       3     5.4           711    300226
7       3     3.7          1441    394254    14409  3119648
7       3     2.6          1612    110906
7       3     2.2          2516    143344
7       3     4.4           310     54030
7       3     2.4            91     15037
7       3     1.2          1470    348720
7       3     4.3           208     17078
7       3     3.6           643    136715
7       3     2.5           121     11400     6971   837230
7       3     3.2          2739    481906
7       3     5.1           208         0
7       3     1.1           820    101475
7       3     3.1          1020     80670
7       3     1.3           492     77640
7       3     6.3           180     15250
7       3     3.4           335     45130
7       3     2.1           338      4500                        15255
7       4     2.5            78         0
7       4     4.4           208     29165
7       4     2.6          1257    114525
7       4     1.3           529     16500
7       4     2.2           468     69902
7       4     3.1           260     11575
7       4     3.7           706     72201
7       4     2.3            52         0
7       4     2.4           156     15389
7       4     6.4           104         0
7       4     3.2          4102    627391    14052  1763219
7       4     3.6           144     12100      144    12100
7       4     3.4           758    101628
7       4     1.1          1006    215611
7       4     6.3           122     18955
7       4     5.4            36      5010
7       4     2.1           272     81800
7       4     1.2          1846    219084                        12104
7       5     3.2          2821    174987
```

```
KATYEAR REGION  CATEGORY PARTNW  SPONCOST SUM.PTW SUM.SPC AV.RG.PW AV.YR.PW


7       5       6.3          84        0
7       5       3.7          75        0
7       5       2.1          26        0
7       5       3.1         158     6806
7       5       1.3          26        0
7       5       6.2         208    28000
7       5       2.5          18        0
7       5       3.4         541    47576
7       5       4.2          52        0
7       5       2.6        1165    42825    9214  942682
7       5       3.3         351     3150
7       5       1.1         901   345670
7       5       4.1          39        0
7       5       2.2        1077    34045
7       5       4.4         208    10850
7       5       5.4         235   100000
7       5       2.4         125     268.
7       5       3.2         204    24500
7       5       1.2         570   111770
7       5       5.3          59    36000                    6144   64159
8       1       3.4         147        0
8       1       3.1         416     1000
8       1       4.4         206        0
8       1       3.3         157        0
8       1       2.6         267     8000
8       1       1.2        1224   171258
8       1       1.3         254     2790
8       1       6.2         215    24125    6644  877961
8       1       3.2        1383    46041
8       1       2.2         345      800
8       1       2.4          23        0
8       1       5.4           5        0                    457
8       1       1.1        2959   365361
8       1       6.4         147        0
8       2       2.6        1177   166632
8       2       2.3         117      820
8       2       4.3          96    75000
8       2       1.3         347    20775
8       2       1.1        2651   955184
8       2       5.2          35        0
8       2       2.2         310     6050
8       2       3.4         422    42175
8       2       3.3         106    35000
8       2       3.7        1510   221661
8       2       6.2          99        0
```

```
NATYEAR REGION  CATEGORY PARTN**  SPONCOST SUM.PTN SUM.SPC AV.RG.P* AV.TP.P*


8        2       6.3        101       800
8        2       4.4        160     20342
8        2       2.1        122         0
8        2       3.1        271     24510
8        2       6.4        102      5052
8        2       4.1        534      1500
8        2       1.2       3589    554404
8        2       3.2       4267    492594
8        2       2.4        767     19465
8        2       6.1         24     17000
8        2       3.6        653     46300                      20501
8        3       4.5         76      8450
8        3       3.3        416     32500
8        3       5.4        585     87600
8        3       2.4        312     18484
8        3       3.7        424     14100
8        3       2.6       1474     33140
8        3       4.3        208     29000
8        3       6.2        330     43625
8        3       6.3        165     24646
8        3       5.1        268         0
8        3       5.3         60     30800
8        3       2.1        303       495
8        3       4.1        357     82935
8        3       4.4        329     24650
8        3       2.2       4683    165511
8        3       1.1        999    221194
8        3       3.2       4536    845931
8        3       2.5         51       496
8        3       6.1        138     15900
8        3       1.3        792     46614
8        3       4.2         70         0
8        3       1.2       1635    209990
8        3       3.6        782     65470
8        3       3.4       1179     84935
8        3       3.1        852    151959                      21464
8        4       1.3        438     45685
8        4       3.6        319     21642
8        4       3.2       2566    289563
8        4       4.2         52      2815
8        4       2.4        195     52850
8        4       3.3        132     19100
8        4       5.4         12         0
8        4       6.1        156     16400
8        4       2.6       1226    141167
```

```
KATYEAR REGION  CATEGORY PARTWW  SPONCOST SUM.PTW SUM.SPC AV.RG.PW AV.YR.PW

   B       4       4.1        96    22377
   B       4       1.1      1609   558681
   B       4       2.1       479   251600
   B       4       1.2      1950   396417
   B       4       3.7       797   175867
   B       4       4.5        32        0
   B       4       3.4       710    40800
   B       4       2.2       883   113413
   B       4       3.1       139     6690
   B       4       2.5        92     2200
   B       4       1.4         8      525                     11691
   B       5       5.2       208    35300
   B       5       1.1       364   107037
   B       5       6.2       225        0
   B       5       5.4       130    61700
   B       5       3.6       268    42060
   B       5       3.1       105     7500
   B       5       2.4       121     2350
   B       5       4.4       208    81500
   B       5       4.1       208    29300
   B       5       2.2       529    60800
   B       5       4.2       156        0
   B       5       2.6      1169   397369
   B       5       1.3       189    36500
   B       5       1.2       374    38960
   B       5       3.7       301     5000
   B       5       2.5        26        0
   B       5       6.3        87     8000
   B       5       3.2       675    48706
   B       5       3.4       468    44300
   B       5       4.5       152    13500
   B       5       5.1        69    20200                      6032    64348

TOTAL WWEEK              167627            82957 12195151  167627   167627
```

Volume

2

Economic Impact Assessment of the Katimavik Program
Phase 2

Final Report

Katimavik

July 1985

ECONOSULT

Lavalin

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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

I The major objective of this study was to assess the value of the outputs of the Katimavik program. (Outputs mean the major socioeconomic impacts generated by the Katimavik program). The methodological approach used in this study consisted of two components:

1) a survey conducted with sponsors and former participants of Year 7; and,

2) simulations on the Statistics Canada input-output model.

II Results from survey and simulations indicate that

1) The phase 1.0 evaluation of the actual work performed by the participants has been verified and proven accurate.

2) Most of the sponsors (61%) would pay the participants $5 an hour or less for their work on the project, if they had had to pay for their services.

3) Close to 90% of the sponsors evaluated the quality of work, skill level and motivation of participants as good or better.

4) In terms of benefits to the sponsoring communities, results indicated that a large part of the projects would not have been realized without Katimavik (57%), and that the savings in sponsor costs totalled $14,365,569 for the 321 projects in year 7.

5) Since the participants have completed Katimavik:

   i) more former participants are working, and less are studying;

   ii) average earnings of former participants have increased by 39 cents an hour, (inflation already accounted for), for those who are working full time, compared to those who worked full time before Katimavik;

   iii) influence of Katimavik on type of job could not be proven statistically, nor could the influence of Katimavik on participants' decision to return to school and their choice of topic of study;

   iv) former participants noticed a positive and significant change in their "work/study" behavior, since they have completed Katimavik.

6) Every dollar spent by Katimavik and its sponsors generates $2.43 of production in the economy.

7) The supplementary production due to Katimavik expenditures generates 507 jobs per year in addition to those created at Katimavik (490).

III. Approach:

- The two surveys (sponsors and participants) were conducted by telephone interview from March 8th, 1985 through May 15th, 1985.

- 85 sponsors and 265 former participants were randomly selected by region and work category from a sample of 150 project profiles, classified by work category.

- 49 out of the 85 sponsors (57.1%) and 172 out of the 265 former participants (64.9%) were successfully contacted and interviewed. Those response rates can be considered as good, as good response rates generally oscillate between 45% and 55%.

- Data processing was completed with the help of the SPSS software which produces statistical analyses like frequency variable tables, cross tabulation tables and statistical tests on independency of variables.

- Two types of inputs were presented to the Statistics Canada input-output model division, Katimavik expenditures and sponsor expenditures. Katimavik expenditures were provided by the Katimavik accounting department and sponsors' costs were projected from costs collected from the files of the interviewed sponsors. The input-output model provides information on generated production and employment as a result of Katimavik and sponsors' spending.

1.0 INTRODUCTION

In September 1984, Econosult Inc., submitted to Katimavik the results of the first phase to the assessment of the economic impact of the Katimavik Program. Because of time constraints it had been decided that the value of the economic impact would be, in a first phase, estimated by using the value of the inputs(1) to the program. Afterwards, in a second phase, this estimate would be refined by using an assessed measure of the outputs to the program.

It is important for the Katimavik administration to have such an estimate. On the one hand it provides them with a measure of the program's value for the Canadian Society. On the other hand it will enable them to inform potential sponsors of the value of the work performed by the participants.

Although the value of the inputs does provide a good estimate of the economic impact of the program, the value of the outputs is a much more interesting result for the decision maker.

The value of the inputs does not take into account:

- the fact that the value assigned to the labor component may not truly reflect the quality of the work performed;
- the economic and social benefits generated due to the fact that many of the projects would not have been realized without Katimavik;

---

(1) The inputs to the program can be defined as the number of participant weeks and the sponsor cost whereas the outputs refer to the value of the services performed and the benefits to the participants and society.

- the economic and social benefits related to the development of the participants.

The quantification of these outputs enables the decision maker to pre-evaluate the activities of the program and therefore better orient these activities in view of the objectives to be attained. It could also be used as a marketing tool.

PART I - OBJECTIVES OF THE STUDY AND METHODOLOGY

PART I OBJECTIVES OF THE STUDY AND METHODOLOGY

2. OBJECTIVES OF THE STUDY

This report assesses the Economic Impact of the Katimavik program. In this second phase, the main goal is to quantify the outputs of the program. These outputs can be defined as being:

1) the quality of the work performed by the participants in the sponsoring communities;
2) the economic and social benefits generated due to the fact that many of the projects would not have been realized without Katimavik;
3) the economic and social benefits related to the development of the participants;
4) the expenditures in the Canadian economy generated by the expenditures of the Katimavik program and the participating sponsors.

The main objectives of the study are to evaluate:

1) the actual work performed by the participants;
2) the sponsors' willingness to pay for participant services, if they had to;
3) the sponsor appreciation of the Katimavik participants;
4) the economic and social benefits of the program in the communities where projects have been realized;
5) the economic and social benefits of the program on participant development;
6) the global impact of the expenditures made by the Katimavik program and its sponsors on the Canadian economy.

In order to meet these objectives two main tasks have been undertaken. The first task consisted of designing two questionnaires, one to be answered by the sponsors, the other one by participants. The main goal of the second task was to prepare a document that would enumerate the expenditures of both the Katimavik program and the sponsors, for the projects. This document was then sent to Statistics Canada input-output model department, in order to calculate the effects of these expenditures on the Canadian economy.

The next section describes the questionnaires that were formulated to evaluate sponsor and participant impacts.

3. METHODOLOGY

In addition to explaining how both questionnaires (sponsor and participant) were prepared, this section also presents how the sponsor and participant samples were selected. Finally, the usefulness of the data, which was collected from the surveys, will be presented.

3.1 QUESTIONNAIRE

Two questionnaires were designed to determine quantitative and qualitative effects of the Katimavik program on participants and on the communities where projects took place. It was decided that questions would be asked, respectively, to sponsors and participants through telephone interviews. Both questionnaires were established to respond to the main objectives of the study, stated previously.

3.1.1 Sponsors

Seventeen questions were elaborated for the sponsor questionnaire. The main goal of this questionnaire was also to determine if the sponsors would or would not have supported their project without Katimavik participation. The sponsors were also asked to evaluate how much the project would have cost without Katimavik input: these two points were used in the estimation of objective "#4", which was to evaluate the economic and social benefits of the program on the communities where the projects were held. This questionnaire was also used to verify the work performed evaluation that was previously established in phase 1. This task corresponds to objective "#1", which is to evaluate the quality of actual work performed by participants. Finally, the third objective treated by this questionnaire deals with the determination of sponsor's willingness to pay the participants if they had to.

Other questions were also elaborated to qualify the quantitative answers we would get from the sponsors.

Table 1.0, shown below, lists the questions that were asked the sponsors. The table relates the questions to the objectives they were designed to achieve, as well as the purpose or utility of including the particular question.

3.1.2 Participants

Thirty-one questions were asked the participants. Most of the questions were used to evaluate economic and social benefits of the program on participant development. Since the majority of the benefits related to participant development cannot be easily quantified, most of the questions provide qualitative results.

The main goal pursued in this questionnaire was to evaluate the economic and social benefits of the Katimavik program on participant development. Several development criteria were observed "before" and "after" Katimavik. The participants' personal development was to be determined by measuring the differences in salary, type of jobs, education level, between the before" and "after" Katimavik situation.

Another methodology could have been used to determine the change in participant development. This method would have compared personal development criteria between former Katimavik participants and former Katimavik applicants who were not selected for the program. Another questionnaire would have been prepared for a control group of former applicants that did not follow Katimavik. Development would then have been compared between former participants and former applicants.

The reason this methodology has not been employed resides in the fact that a sampling of former applicants was not available for year 7. If a sample of former applicants from another year was used, the basis of comparison would have been biased because former participants and applicants do not have the same starting point. If a comparison of personal development is to be made between two groups, one must be able to observe the two groups over the same period so both groups would then be facing the same economic and social constraints. In this case, it is easier to isolate the impact of a program like Katimavik on one group and observe its effect on personal development criteria.

Table 2, presented in the same format as table 1, illustrates the relationship between the objective pursued by a question and the question's utility.

TABLE 1.0 RELATION BETWEEN THE OBJECTIVE,
THE PURPOSE AND THE QUESTION ASKED TO THE SPONSOR

QUESTION	OBJECTIVE #	PURPOSE (Section of the study where it applies
I. SPONSOR IDENTIFICATION		
1. Name of the sponsor organization		Identification purpose to retrace sponsor expenses from Katimavik information file on sponsors.
2. Katimavik year of participation	6	Classification purpose; all sponsors should be classified in year 7.
3. Phase of participation	6	Classification purpose; all sponsors should be classified in phases 3, 4 or 5. (Section 4.1)
4. Work category	6	Classification purpose; previously established by Katimavik. (Section 4.1)
5. Number of participants in the project.	6	Importance of sponsor in the project as a whole. (Section 4.1)
II. TYPE OF WORK THE PARTICIPANT PERFORMED		
6. Type of work of the participants	1	To verify if participants work performed, corresponds to assigned work category. (Section 5.1)
III. PARTICIPANTS' APPRECIATION		
7. Evaluation of the degree of work skills shown by the participants	3	To evaluate participants work on certain criteria; and also to prepare the sponsor psychologically before evaluating the wage rate conceded to participants (question 10) based upon these criteria. (Sections 5.2 and 5.3)
8. Evaluation of the quality of the work accomplished by the participants.	3	
9. Appreciation of the degree of motivation shown by the participants.	3	
10. Wage rate conceded to participants if sponsors would have paid participants.	2	Evaluation of sponsors "Willingness to pay". (Section 5.2)
11. Appreciation of participants on the basis of wage rates	2	To qualify to choice sponsor made in previous question; to determine what proportion of the participations would have deserved the indicated wage rate. (Section 5.3)
IV IMPACT OF THE PROJECT		
12. Realization of the project even without Katimavik	4	To determine if Katimavik help us crucial for the community in order to see its project completed. (direct benefits to the community) (Sections 6.2 and 6.3)

QUESTION	OBJECTIVE #	PURPOSE (Section of the study where it applies)
13. Cost of the project without Katimavik	4	To determine benefits of the projects (Cost without Katimavik) - Benefits for the community. (Sections 6.2 and 6.4)
14. Modification of the sponsor organisation because of Katimavik	4	To identify if supplementary benefits are generated because of Katimavik. (Section 6.5)
15. Activities created because of budget modifications	4	To identify the nature of supplementary benefits to the community, generated because of Katimavik. (Section 6.5)
16. Money allocated to those new activities	4	To quantity the previously identify supplementary benefits. (Section 6.5)
17. Hiring of former Katimavik participants	5 & 3	To verify if participants would be hired on the labor market after their participation in the program. (Section 7.7)
18. General work related characteristics acquired by participants during project participation	5	To determine which important work characteristics participants have developped during their participation. (Section 7.7)

TABLE 2.0 RELATIONSHIP BETWEEN THE OBJECTIVE AND THE PURPOSE OF QUESTIONS ASKED TO SURVEYED PARTICIPANTS.

QUESTION	OBJECTIVE #	PURPOSE (Section of the study where it applies)
I. PARTICIPANTS IDENTIFICATION		-
1. Name of the participant		Identification purpose
2. Year of participation		Classification purpose; all participants surveyed must be classified in year 7.
3. Month of completion		Classification purpose; to see if last month of experience has a bearing on the activities "after".
4. Katimavik phase		Classification purpose; all participants surveyed must have completed experience in phases 3, 4 or 5. (Section 4.2)
5. Age of the participant		Classification purpose. (Section 4.2)
II. ACTIVITY DESCRIPTION AFTER KATIMAVIK		
7. Main activities after Katimavik	5	To compare with the before situation in order to eventually identify any improvement in the after situation. (Section 7.2)
8. Number of months passed per activities	5	Importance of the time past in every activity mentioned in the previous question. (Section 7.2)
9. Type of work; full-time and part-time	5	Qualitative information on the present working activity(ies) of the former participant. (Section 7.3)
10. Wage rate; full time work and part-time work by type of job.	5	Quantitative information on the work activity; will be used to calculate the average hourly work increase; which is a work related impact. (Section 7.5)
11. Working hours per week; full time or part-time, by type of job		Quantitative information to be used for calculating the average weekly increase in work-hours. (Section 7.5)
12. Education level or grade, if former participants is studying	5	Qualitative information on the educational activity. Will be compared with former educational level or grade, before Katimavik. (Section 7.1)
13. Topic of study of the former participant	5	Qualitative information on the educational activity. Could quality the relationship between Katimavik and choice of topic of study. (Section 7.1)

QUESTION	OBJECTIVE #	PURPOSE (Section of the study where it applies)
14. If participant is studying; plans after school.	5	To indicates if the future plans of the former participant are compatible with what he or she doing right now (Topic of study). (not used)
15. Katimavik influence on returning to school or type of jobs.	5	Qualitative information on the influence on decision to return to school or the present type of job. (Qualitative impact of Katimavik on the former participant main activity. (Sections 7.5 and 7.6)
16. Relationship between Katimavik and the type of skills required for jobs, or the subject of study.	5	Qualitative information on the relationship of Katimavik with type of skills required for jobs or subject of study. (Qualitative impact of Katimavik on the former participant main activity). (Sections 7.5 and 7.6)
III ACTIVITY DESCRIPTION BEFORE KATIMAVIK		
17. Main activities before Katimavik	5	To compare with the after situation in order to identify an improvement in the before situation. (Section 7.2)
18. Number of months passed per activities	5	To show the importance of the time past in every acticity mentionned in the previous section.
19. Type of work; full time and/or part-time	5	Qualitative information on the prior Katimavik activity of the former participant.
20. Wage rate; full time work and part-time work by type of job	5	To be used to calculate the average hourly work increase; work related impacts (Section 7.2)
21. Working hours per week; full time and/or part time; by type of job	5	Quantitative information to be used for calculating the average weekly increase in work hours. (Section 7.5)
22. Educational level or grade, if former participant was studying	5	Qualitative information on the educational level on grade after Katimavik (Section 7.2)
23. Topic of study of the former participant.	5	Qualitative information; to be used in comparing relationship between Katimavik and topic of study. (Section 7.1)
24. If former participant was studying before Katimavik; plans after school	5	To compare future plans of participant with former ones. (Not used)
25. Reasons for stopping to work for and	5	To identify if former participant fullfil it's goals in participating to the Katimavik program. (Not used)

QUESTION	OBJECTIVE #	PURPOSE (Section of the study where it applies)
26. Compability of work or study of lifestyle before and after Katimavik	5	To identify if lifestyle and professional activities have changed after Katimavik. (Sections 7.5 and 7.6)
27. Reasons for compatibility or incompatibility	5	To group reasons of compatibility into a common classifications. (Sections 7.5 and 7.6)
28. Relation of the change(s) identified in the previous question with Katimavik	5	If a change was indicated in questions 26 and 27, this question tries to identify of there is a link with Katimavik. (Sections 7.5 and 7.6)
29. Reason to believe this change is related or unrelated to the Katimavik experience	5	To qualify the relation with Katimavik. (Sections 7.5 and 7.6)
30. Frequency of occurence of three situations related with leadership and initiative, before and after Katimavik	5	To measure behaviour work habits of former participants. (Section 7.7)
31. Frequency of occurence of three situations related with work responsability and tenacity, before and after Katimavik	5	
32. Frequency of occurence of one situation related with ponctuality, before and after Katimavik	5	
33. Frequency of occurence of five situations related with sociability; team work and work behavior before and after Katimavik	5	

3.2 SURVEY

As it was previously mentioned, the sponsor questionnaire and the participant questionnaire were designed to determine quantitative and qualitative effects of the Katimavik program on participants and on the communities where projects took place. Once the questionnaires were designed and approved by Katimavik, the following steps had to be determined

1) how the sponsors and participants were going to be interviewed ;
2) how the respondents were going to be selected ;
3) the interview approach.

This section describes the sampling process for sponsors and participants and the adopted interview approach.

3.2.1 Samples

Samples for the sponsor questionnaires and participant questionnaire were compiled from Katimavik project profiles, for phases 3, 4 and 5. A total of 150 project profiles were submitted to Econosult inc. at the beginning of the study. These project profiles provided the name of the sponsoring organizations, the person in charge of the Katimavik project, the other sponsors that will benefit from Katimavik participation, an estimate of the number of hours necessary to complete the work of the project, a general description of the community, a description of the work to be performed by participants and finally the names of 12 participants who completed a rotation in that particular community. All of these projects profiles were classified by work category. This classification was designed by Katimavik for the work elaborated in phase 1.

In the proposal, it was decided that 300 interviews of sponsors and participants would be realized. The interview process took longer than expected because sponsors and participants were harder to reach than it was previously expected. A sample of 85 sponsers and 265 participants were randomly selected by region and work category so that sample respect those constraints. 49 sponsers out of the 85 (57.6 %) and 172 participants out of the 265 (64.9 %) were successfully contacted and interviewed. These response rates are very acceptable because an acceptable response rate for a telephone interview oscillates between 45 % and 55 %. So on a statistical point of view, the samples are more than valid.

Table 3.0 illustrates the distribution of the projects, the sponsors and the participants by work category and region.

The following table (4.0) indicates the distribution of the sponsors and participants selected in the samples.

From those two tables, it can be seen that the relative importance of sponsors and participants has been respected in born sample selection for the survey.

3.2.2 Approach during the survey

It was decided that the interviews would be conducted by telephone in order to be as close as possible to a personal interview. The reason to proceed that way was to collect as much information as possible from the more open questions and to be sure the respondents would understand correctly the questions.

Even if telephone interviews takes as much time as sending a mailing questionnaire, the results are more precise than the questionnaire sent by mail for three main reasons:

TABLE 3.0 - NUMBER OF PROJECTS, SPONSORS AND PARTICIPANTS BY REGION AND WORK CATEGORY

WORK CATEGORY	# PROJECTS					# SPONSORS					# PARTICIPANTS				
	A	Q	O	P	P_a	A	Q	O	P	P_a	A	Q	O	P	P_a
1.1 Building	4	4	1	1	2	4	11	1	1	3	34	34	8	6	21
1.2 Renovations	1	4	1	4	1	1	12	1	6	1	6	32	10	38	11
1.3 General maintenance & repairs	0	3	0	3	1	0	5	0	3	1	0	22	0	24	10
1.4 Energy conservation work	0	2	0	0	0	0	2	0	0	0	0	20	0	0	0
TOTAL 1.0 Construction	**5**	**13**	**2**	**8**	**4**	**5**	**30**	**2**	**10**	**5**	**40**	**108**	**18**	**68**	**42**
2.1 General Hospital work	0	1	2	1	0	0	2	4	1	0	0	8	19	10	0
2.2 Work with elderly, handicapped and disavantaged	2	4	3	2	0	4	12	2	6	0	21	38	18	21	0
2.3 Referral services	0	0	0	1	0	0	0	0	2	0	0	0	0	7	0
2.4 Research and clerical work	2	1	0	1	0	5	2	0	1	0	18	9	0	11	0
2.5 Library work	0	1	3	1	0	0	3	4	6	0	0	5	24	10	0
2.6 Other	1	1	4	3	0	3	1	7	4	0	10	9	31	21	0
TOTAL 2.0 Social Service Activities	**5**	**8**	**12**	**9**	**0**	**12**	**20**	**17**	**20**	**0**	**49**	**69**	**92**	**80**	**0**
3.1 Trail clearing, ski trails, sidewalks, access roads & ramps	1	1	6	1	2	1	3	11	1	2	8	6	55	9	19
3.2 Habitat/campground, improvement, development	3	4	4	3	5	3	5	9	10	11	23	38	29	24	38
3.3 River and stream clearing	1	1	0	0	2	1	1	0	0	8	10	9	0	0	13
3.4 General clean up and maintenance	3	0	0	1	2	3	0	0	1	1	18	0	0	3	11
3.5 Surveying	0	0	0	1	0	0	0	0	1	0	0	0	0	9	0
3.6 Tourism development and information	0	4	2	2	2	0	9	6	2	5	0	35	19	15	18
3.7 General work in a municipality	0	5	1	3	0	0	16	1	3	0	0	38	7	21	0
TOTAL 3.0 Parks Recreation and Development	**8**	**15**	**13**	**11**	**13**	**8**	**34**	**27**	**18**	**27**	**69**	**126**	**110**	**81**	**99**
4.1 Tree planting	3	1	1	0	0	3	6	4	0	0	25	7	11	0	0
4.2 General nursery work	1	0	2	1	0	1	0	2	1	0	9	0	19	9	0
4.3 General nursery work	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.4 General nursery work	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4.5 General nursery work	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL 4.0 Silviculture	**4**	**1**	**3**	**1**	**0**	**4**	**6**	**6**	**1**	**0**	**34**	**7**	**30**	**9**	**0**
5.1 Archeological field work	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.2 Restoration work	0	0	1	0	1	0	0	1	0	5	0	0	9	0	7
5.3 Research lab-work	0	0	1	0	0	0	0	4	0	0	0	0	9	0	0
5.4 Work at museum or historical site	1	0	2	0	2	1	0	5	0	4	8	0	17	0	18
TOTAL 5.0 Archeological Work	**1**	**0**	**4**	**0**	**3**	**1**	**0**	**10**	**0**	**9**	**8**	**0**	**35**	**0**	**25**
6.1 Work in a cemetery	0	1	0	0	0	0	5	0	0	0	0	9	0	0	0
6.2 Recycling	0	2	0	0	0	0	2	0	0	0	0	19	0	0	0
6.3 General clerical Work	0	0	1	1	0	0	0	6	3	0	0	0	10	9	0
6.4 Physical Work for Parish	0	2	0	0	0	0	6	0	0	0	0	17	0	0	0
TOTAL 6.0 Miscellaneous	**0**	**5**	**1**	**1**	**0**	**0**	**13**	**6**	**3**	**0**	**0**	**45**	**10**	**9**	**0**
TOTAL	**23**	**42**	**35**	**30**	**20**	**30**	**103**	**68**	**52**	**41**	**200**	**355**	**295**	**247**	**166**
GRAND TOTAL	**150**					**294**					**1 263**				

NOTE : A : Atlantic Q : Quebec O : Ontario P : Prairies P_a: Pacific

TABLE 4.0 - PARTICIPANTS AND SPONSORS

WORK CATEGORY	# SPONSORS					# PARTICIPANTS						
	A	Q	O	P	P_a	A	Q	O	P	P_a		
1.1 Building	1	3	0	0	1	7	7	2	1	4	21	7.9
1.2 Renovations	0	4	0	2	0	1	7	2	8	2	20	7.5
1.3 General maintenance & repairs	0	1	0	1	0	0	5	0	5	2	12	4.5
1.4 Energy conservation work	0	1	0	0	0	0	4	0	0	0	4	[illegible]
TOTAL 1.0 Construction	**1**	**9**	**0**	**3**	**1**	**8**	**23**	**4**	**14**	**8**	57	21.5
2.1 General Hospital work	0	1	1	0	0	0	2	4	2	0	8	3.0
2.2 Work with elderly, handicapped and disavantaged	1	4	1	2	0	4	8	4	4	0	[illegible]	7.5
2.3 Referral services	0	0	0	1	0	0	-	0	2	0	[illegible]	[illegible]
2.4 Research and clerical work	2	1	0	0	0	4	2	0	2	0	[illegible]	[illegible]
2.5 Library work	0	1	1	2	0	0	1	5	2	0	[illegible]	[illegible]
2.6 Other	1	0	2	1	0	2	2	7	4	0	15	[illegible]
TOTAL 2.0 Social Service Activities	**4**	**7**	**5**	**6**	**0**	**10**	**15**	**20**	**16**	**0**	[illegible]	23.0
3.1 Trail clearing, ski trails, sidewalks, access roads & ramps	0	1	3	0	1	2	1	11	2	4	[illegible]	[illegible]
3.2 Habitat/campground, improvement, development	1	1	3	3	3	5	8	6	5	8	[illegible]	12
3.3 River and stream clearing	0	0	0	0	2	2	2	0	0	3	7	[illegible]
3.4 General clean up and maintenance	1	0	0	0	0	6	0	0	1	2	[illegible]	3.4
3.5 Surveying	0	0	0	0	0	0	0	0	2	0	[illegible]	0.8
3.6 Tourism development and information	0	3	2	1	1	0	7	4	3	4	18	6.8
3.7 General work in a municipality	0	5	0	1	1	0	8	2	4	0	[illegible]	5.3
TOTAL 3.0 Parks Recreation and Development	**2**	**10**	**8**	**5**	**8**	**15**	**26**	**23**	**17**	**21**	[illegible]	[illegible]
4.1 Tree planting	1	2	1	0	0	5	2	2	0	0	[illegible]	[illegible]
4.2 General nursery work	0	0	1	0	0	2	0	4	2	0	[illegible]	3.0
4.3 General nursery work	0	0	0	0	0	0	0	0	0	0		
4.4 General nursery work	0	0	0	0	0	0	0	0	0	0		
4.5 General nursery work	0	0	0	0	0	0	0	0	0	0		
TOTAL 4.0 Silviculture	**1**	**2**	**2**	**0**	**0**	**7**	**2**	**6**	**2**	**0**	17	[illegible]
5.1 Archeological field work	0	0	0	0	0	0	0	0	0	0	-	[illegible]
5.2 Restoration work	0	0	0	0	1	0	0	2	0	2	4	1.5
5.3 Research lab-work	0	0	1	0	0	0	0	2	0	0	2	0.8
5.4 Work at museum or historical site	0	0	1	0	1	2	0	4	0	4	10	[illegible]
TOTAL 5.0 Archeological Work	**0**	**0**	**2**	**0**	**2**	**2**	**0**	**8**	**0**	**6**	16	[illegible]
6.1 Work in a cemetery	0	1	0	0	0	0	2	0	0	0	2	[illegible]
6.2 Recycling	0	1	0	0	0	0	4	0	0	0	4	1.5
6.3 General clerical Work	0	0	2	1	0	0	0	2	2	0	4	1.5
6.4 Physical Work for Parish	0	2	0	0	0	0	4	0	0	0	4	1.5
TOTAL 6.0 Miscellaneous	**0**	**4**	**2**	**1**	**0**	**0**	**10**	**2**	**2**	**0**	14	5.3
TOTAL	**8**	**19**	**19**	**15**	**11**	**42**	**76**	**61**	**51**	**35**		
GRAND TOTAL	**85**					**265**						

NOTE : A : Atlantic Q : Quebec O : Ontario P : Prairies P_a: Pacific

1) respondents can ask for information if they do not understand questions ;
2) there is a better chance of getting answer on more open questions because respondents are more enclined to talk about a given situation than to write ;
3) Possibility to re-adapt the question formulation according to the answers of the previous respondents.

3.3 DATA PROCESSING

Once all questionnaires have been completed, two important tasks of data processing have to be completed; the codification of the questionnaires and the computer processing of coded results with the SPSS software.

The next two sections give a detailed explanation of those two operational steps.

3.3.1 Codification of questionnaires

All the information obtained from questionnaires must be coded into numbers in order to be processed by a statistical computer software. The codification simply means that answers are being translated into numbers and string of numbers are then associated to choices of answers. The two sets of questionnaires which had to be coded (sponsor and participant), caused minor problems, because some of the questions were open-ended. This situation leads to a wide variety of answers, and the coder has then to divise a way to include all of the possible responses, for a given question, answered in the codification.

For example, the former participants interviewed had to enumerate their activities since they had completed Katimavik. There was a total of eight answers to choose from and a respondent could answer any combination of the eight choices. A first codification was made in order to include all choices made by respondents, but there was too many combinations to draw conclusions from all the combinations. So, there has been a recoding of the answers that provides the major activities of the former participant since he or she has completed Katimavik. A few questions had to be recoded for that reason.

3.3.2 Computer processing of coded results

Once all the codification is completed, the data is processed on SPSS software so statistical results could be drawn from the questionnaires. The type of statistical results retained were frequency variable tables and cross tabulation tables. Frequency variable tables provide response frequency for all the choices of a question. Cross tabulation tables illustrates how many respondents answered, for example, to choice A in question 1 and choice B in question 2. This last statistical exercice is very useful but one has to be sure there is a meaningful correlation between the two, or more, questions, before association drawing any conclusions from crosstabulation analysis.

In order to refine the data presented in this last table, a cross tabulation was calculated between:

1) Participant activities before Katimavik;

2) Participant activities after Katimavik, and;

3) The influence of Katimavik on the return to school by former participants.

Results from this analysis indicate that:

1) Katimavik had a "significant influence" on the return to school of only six participant or 42.9 % of the cases where participants have indicated "full time school" or "part time school" as their primary activity.

2) On the other hand, Katimavik had an insignificant influence on the return to school of nine participants or 64.3 % of the cases where participants have indicates "full time school" or "part time school" as their primary activity.

PART II RESULTS OBTAINED FROM QUESTIONNAIRE

4.0 GENERAL PROFILE OF SAMPLES

4.1 SPONSORS

49 out of 85 sponsors (57.1%) of projects in Katimavik Year 7 were successfully contacted. The remaining 36 (42%) sponsors were either no longer working for their particular organization or couldn't be reached, even after several attempts.

All but one of the 49 sponsors (98%) contacted completed the telephone questionnaire. The remaining sponsor partially completed the questionnaire. There were no refusals.

The breakdown by phase and work category of the 49 sponsors contacted is as follows:

Phase 3: 35%
Phase 4: 35%
Phase 5: 30%

Category 1: Construction Work - 18.0%
Category 2: Social Service Activities (Non-physical) - 20.0%
Category 3: Parks, Recreation & Civic Development - 42.0%
Category 4: Siviculture - 6.0%
Category 5: Miscellaneous - 6%

The total number of Katimavik participants who worked on the 49 contacted sponsors' projects was 331. The number of participants per sponsor's project range from 2 to 12 participants.

4.2 PARTICIPANTS

172 out of a sample population of 265 (64.9%) participants, drawn from the Katimavik project profile list, were successfully contacted. The remaining 93 participants (35.1%) were unable to be contacted for the following reasons:

a) wrong telephone numbers;

b) moved and there was no forwarding telephone number; or,

c) they couldn't be reached, even after several attempts.

All 172 questionnaires were completed. There were no refusals.

The breakdown of contacted participants per phase is as follows:

Phase 3: 32%
Phase 4: 34%
Phase 5: 34%

The age/sex breakdown of the contacted participants is as follows:

Sex

Male : 53%
Female: 47%

Age (age at time of participation)

17 years old: 11%
18 years old: 18%
19 years old: 34%
20 years old: 24%
21 years old: 12%
22 years old: 1%

5.0 TRUE VALUE OF LABOR

In the proposal, it was suggested that wage rate is a good measure of the output value of the Katimavik program since it is supposed to reflect quality and productivity. The objective of determining the "true" value of labor of Katimavik participants was to verify the accuracy of the wage rates selected in Phase I, and consequently the estimated value of work performed. Two different opinions had been voiced relating to the estimated value of work in Phase I:

- because the participants are young and unskilled, the value of their work was overestimated;
- because of their personal motivation, the quality of the services rendered by the participants is superior and the value of their work was underestimated.

It was proposed that the "true" value of labor be based ont the sponsors' "willingness to pay".

5.1 ACTUAL WORK PERFORMED

In our sponsor sample there were several cases where the type of work performed by the Katimavik participants for the interviewed sponsor did not always correspond to the work category assigned to the whole project. The actual work performed by the Katimavik participants for the contacted sponsors was as follows:

planning activities	4
office work	3
education tasks/work with children	11
tree planting & care	4
work with handicapped	2
work with elderly handicapped and children	1
laboratory work	1
construction	5
renovation interior	15
renovation exterior	7
bush clearing	5
maintenance	7
city maintenance	13
equipment maintenance	3
newspaper work - media	2
radio work - media	1
library work	1

The list of actual work performed was translated into work categories. Tables 5.0 illustrates how the actual work performed categories were assigend to Katimavik work categories.

The list of actual work performed was translated into work categories. Table 5.0 illustrates how the actual work performed categories were assigned to Katimavik work categories.

TABLE 5.0 ACTUAL WORK PERFORMED ASSESSMENT BY WORK CATEGORY

ACTUAL WORK PERFORMED BY PARTICIPANTS	KATIMAVIK WORK CATEGORIES					
	CONSTRUCTION	SOCIAL SERVICE ACTIVITIES	PARKS, RECREATION AND CIVIC DEVELOPMENT	SILVICULTURE	ARCHEOLOGICAL WORK	MISCELLANEOUS
1. Planning Activities		2	2			
2. Office work		1				2
3. Education tasks/ work with children		5	6			
4. Tree planting and care				4		
5. Work with handicapped		2				
6. Work with elderly		4				
7. Combination of 3, 5, 6		1			1	
8. Laboratory work			2			
9. Construction	3					
10. Renovation-interior	15					
11. Renovation-exterior	7					
12. Bush clearing			5			
13. Maintenance	3		4			
14. City maintenance			13			
15. Equipment-maintenance			3			
16. Newspaper work						2
17. Radio work						1
18. Library work		1				
% of total	31.5%	18.0%	39.3%	4.5%	1.1%	5.2%
TOTAL	28	16	35	4	1	5

If we regroup the actual work performed into work categories corresponding to Katimavik work category assigned to projects, the breakdown of actual work performed is as follows:

Category 1: Construction Work - 31.5%
Category 2: Social Services Activities (non-physical) -18.0%
Category 3: Parks, Recreation & Civic Development - 39.3%
Category 4: Silviculture- 4.5%
Category 5: Archeaological work - 1.1%
Category 6: Miscellaneous - 5.0%

The assessment of the actual work performed into work categories was determined with the help of the "work project categories" description which was provided to Econosult at the beginning of phase 1.0. Where there was a possibility of overlapping between two categories, a 50-50 split was applied between the two categories.

5.2 "WILLINGNESS TO PAY"

The wage rates that the 49 sponsors contacted were willing to pay Katimavik participants for the work performed are as follows:

$5 an hour or less	61%
$5 to $7 an hour	32%
$7 to $10 an hour	6%
more than $10 an hour	2%

As can be seen, most of the sponsors would have paid the Katimavik participants $5 an hour or less, or as most sponsors indicated, minimum wage.

A finer precision of "willingness to pay" was attempted by asking the sponsor whether he would pay all or only a proportion of the Katimavik participants the indicated hourly wage. The results of this question were, 84% of the sponsors would have paid all or the majority according to the wage rate indicated. The remaining 16% of the sponsors responded that they would have paid less than the majority of their participants according to the indicated wage rate and would pay either more or less per hour, depending on the individual participant's ability and quality of work.

If we project these hourly wage rates on the total number of participants in Katimavik Year 7, an average work week of 37.5 hrs. and a total of 64,196 weeks worked, we arrive at a total output, in terms of "true" value of labor, of $13,516,067.00.

In Phase I, the estimated value of the work performed was calculated at $12,505,909.00. We can, therefore, conclude that this Phase I value was neither significantly overestimated nor underestimated, when we look at "true" value of labor.

5.3 SPONSOR APPRECIATION OF KATIMAVIK PARTICIPANTS

The premise that wage rate, or in this case the sponsors' "willingness to pay", is a reflection of quality and productivity was tested by a series of questions relating to the sponsors' appreciation of the work characteristics and work performed by the Katimavik participants. The questions asked the sponsors to evaluate the work motivation, quality of work and skill level of the participants. A final question was whether or not the sponsor would be willing to hire their Katimavik participants.

The sponsor responses on motivation, quality and skill level were fairly consistent:

a) 18.5% of the sponsors evaluated the work quality as being "excellent" and the skill level as being "very skillfull";

b) 69.5% of the sponsors evaluated the work quality as "good" and skill level as being "somewhat skillful"; and,

c) 12% of the sponsors evaluated work quality as "fair" to "bad" and skill level as being "not skillfull" at all".

The sponsors' evaluation of the degree of motivation at work demonstrated by the participants also closely approximated this pattern:

a) 22.5% of the sponsors evaluated participant motivation as being "excellent";

b) 67.5% evaluated motivation as being "good"; and

c) only 10% evaluated motivation as being "fair".

When asked whether or not they would be willing to hire Katimavik participants for full-time positions, 89% of the sponsors who responded to this question answered "yes".

We can conclude that the overall sponsor appreciation of Katimavik participants was very positive. It would seem however, that "willingness to pay" does not always accurately reflect quality and productivity and would indicate that other factors may influence the hourly wage rate the sponsors were willing to give participants for the work performed. In fact, several sponsors qualified the hourly wage they were willing to pay, by stating that there were other constraints such as the fact that average salaries in their field of work were low. This was true almost always for organizations involved in nature and wildlife conservation, park development, social service activities (i.e. work with elderly, handicapped, children). This situation reflects the very nature of the Katimavik program, where sponsors appear to be organizations in need of volunteer help because they have very modest operating budgets.

6.0 ECONOMIC AND SOCIAL BENEFITS - PROJECTS

6.1 CONTEXT

To determine the economic and social benefits generated by the realization of the sponsors' projects, it was proposed, first, to establish whether the project would have been realized without Katimavik participation and if so, at what additional costs. The differences between the "with" and "without" the program would then constitute the direct economic and social impact of the Katimavik Program.

6.2 SUPPORT OF PROJECT "WITHOUT"

Of the 49 sponsors that responded to whether or not they would have been able to undertake their project without Katimavik participation, 57% indicated that they would have been unable to proceed without Katimavik. Two sponsors indicated that the question did not apply to their situation. Although 39% of the sponsors indicated that they would have proceeded without Katimavik, in some instances, the work performed by the Katimavik participants offered relief to full-time staff in accomplishing their daily activities, while in other cases other forms of volunteer help would have been recruited.

6.3 PROJECT COSTS "WITHOUT"

The estimated costs of the projects, if they would have been undertaken "without" Katimavik, ranged from $0.00 (where other volunteer help would have been used) to $175,000.00. We regrouped the amounts that would have had to have been expended on these projects into more workable ranges. Results show that close to 50% (24 of the projects) would have cost an additional $10,000 to $50,000.00 without Katimavik. The average additional cost per project was calculated at close to $23,000.00.

Since the sponsors interviewed generally represented one of several sponsors of a whole project, we calculated the proportion of the real costs to the interviewed sponsors with Katimavik participation, to the total real sponsor costs of the 49 projects, in order to determine the relative weight of the interviewed sponsor's projects to the whole of the 49 projects. In applying this proportion to the estimated costs for the interviewed sponsors' projects without Katimavik, we arrive at a total additional cost of $2,192,875.00 for the 49 projects, if they had been undertaken without Katimavik. Projected on the total number of projects in Year 7 (321 projects), we arrive at an estimated additional cost of $14,365,569.00 to sponsors without Katimavik.

6.4 DIRECT ECONOMIC IMPACT

Two effects could be directly attributed to Katimavik:

1) The total expenditures of the Katimavik program and of the sponsors who would not have undertaken the projects without Katimavik

2) The saving of $14,365,569 by the sponsor which corresponds to the additional cost of sponsors without Katimavik help.

But the direct economic net impact of the Katimavik Program is considered to be the difference between the "with" costs of the projects and the "without" estimated costs of the project. The real sponsor costs "with" Katimavik constitued the costs of materials, equipment and transportation to realize the projects and were assumed constant for both the "with" and "without" scenarios. The estimated costs "without" Katimavik represent labor costs. Therefore, the direct economic impact constitutes the difference between the estimated costs (labor costs) without Katimavik and the costs to Katimavik to provide labor to the projects. This gives the following:

estimated labor costs:	$14,365,569
-	
Katimavik costs: (cost of Katimavik for the program)	$20,896,532
	- $ 6,530,936

Although this would suggest that the total projects for Year 7 cost roughly $6 million more than the estimated costs without the program, it is important to note that, as was indicated in section 3.2, close to 60% of the projects would not have been realized without Katimavik participation. Unfortunately, it is impossible to evaluate the social benefit, in dollars, of having realized projects that would have otherwise, never been undertaken.

6.5 INDIRECT ECONOMIC IMPACTS

In a total of 12 cases (25%), sponsors indicated that their annual operating budgets were modified due to Katimavik participation. The cost savings due to Katimavik were used to undertake additional work/activities. While 5 of these sponsors couldn't identify exactly what new activities were undertaken, the remaining 7 identified the following supplementary activities:

1. extention to operating season

2. maintenance activities

3. landscaping

4. cultural activities

5. conservation activities

Of the 12 sponsors who indicated that supplementary activities had been created with the cost savings due to Katimavik, only 10 were able to estimate the amount of money that had been applied to these additional activities. The amounts ranged from $1,000.00 to $40,000.00 The total amount applied to supplementary activities was $111,375.00. If this amount is projected on the total number of projects in Year 7 (321 projects) this would represent $729,620 being applied to supplementary activities created with the cost savings generated by Katimavik participation.

7. ECONOMIC AND SOCIAL BENEFITS TO PARTICIPANT

7.1 CONTEXT

The main objective of the Katimavik Program is to increase the personal development of the participant so that they acquire a better knowledge and understanding of the country, while gaining training and experience. If, in fact, the program has achieved this goal, it was presumed that it would be reflected in the participants' carreer development since participating in the program.

Carreer development was to be determined by measuring the differences in salary, type of job, educational level, etc., between "before" and "after" Katimavik.

7.2 TYPE OF ACTIVITIES "BEFORE" AND "AFTER"

The breakdown by type of activities the participants were engaged in during the full year before entering the Katimavik Program is shown in table 6.0. There is three major changes between before and after activities:

1) 40.7% of former participants stated "full time work" as their major activity after Katimavik compared to 21.5% before Katimavik;

TABLE 6.0 RELATIVE IMPORTANCE OF THE MAJOR ACTIVITIES OF FORMER PARTICIPANTS, BEFORE AND AFTER KATIMAVIK

TYPE OF ACTIVITIES	BEFORE KATIMAVIK #	 %	AFTER KATIMAVIK #	 %
1 Full time work	37	21.5	70	40.7
2 Part time work	26	15.1	40	23.3
3 Full time study	96	55.8	43	25.0
4 Part time study	4	2.3	7	4.1
5 Unemployment	6	3.5	7	4.1
6 Welfare	1	0.6	4	2.3
7 Armed Forces	1	0.6	1	0.6
8 Other	1	0.6	0	0.0
TOTAL NUMBER OF PARTICIPANTS	172	100.0	172	100.0

2) 25.0% of former participants stated "full time study" as their major activity after Katimavik compared to 55.8% before Katimavik. This statement is about the only conclusion that can be drawn from a comparison between school related activities before and after Katimavik. The breakdown of participants currently attending school, does not show a clear impact due to Katimavik. The progression, in school level could be attributed to other reasons than Katimavik, like age and socio-economic factors; such as law employment and newly developed topics of study.

3) 23.3% of former participants stated "part-time work" as their major activity after Katimavik, compared to 15.1% before Katimavik.

(Major activities means that the former participants spent a longer period doing that activity than any other one.)

These changes may find an explaination in table 7.0, which illustrates a cross tabulation between activities before and activities after Katimavik. From that table, one can observe that 34 former participants (19.8%) were studying full time and are now presently working full time; also, 18 former participants (10.5%) were studying full time and are now working part time. One conclusion that can be drawn is that full time study lost 30.3% to full time work and part-time work popularity which approaches the actual level (25.0%);

TABLE 7.0 CROSS TABULATION: ACT. AFTER
ACT. BEFORE

COUNT ACT BEFORE	FTW 1	PTW 2	FTS 3	PTS 4	UNEMPL. 5	ARMED FORCES 6	WELFARE 7	OTHER 8
ACT AFTER								
FTW 1	24	8	34	2	1	-	-	1
PTW 2	8	11	18	-	2	-	1	-
FTS 3	2	1	37	-	2	1	-	-
PTS 4	-	2	2	1	1	-	-	-

LEGEND: FTW = Full time work
PTW = Part time work
FTS = Full time study
PTS = Part time study
- = No relation between the two activities

full time work picks up 19.8% from full time study which brings it very close to 40.7%, its actual level; and finally the 10.5% increase in part time study is due largely to the loss of full time study towards itself. So, the main conclusion to draw from all this, it that every former participants is doing about the same thing as before, except for 30.3% of them who studing full time and are now working.

7.3 TYPE OF JOB

The two breakdowns presented in sections 7.3.1 and 7.3.2 expose the comparison between the proportion of former participants working (full time or part time depending on the case) in different types of occupation.

No significant relation could be drawn from these comparisons, except from the fact that "technical, religious, social and artistic" seems to have registered the strongest increase as the working sector choice of former participants between their "before" working situation and their "after" working situation. Although, no significant statistical relations could be identified between Katimavik and the types of occupation; statistical test, chi-square, rejects the dependancy assumptions between both variables.

7.3.1 Full-time "Before" and "After"

The type of full-time jobs Katimavik participants were engaged in prior to and following their Katimavik experience are presented below (the type of jobs have been categorized according to Statistics Canada's breakdown of occupation):

Occupation	% Before	After
Techno. religious, social, artistic	8.1	17.1
Clerical	5.4	5.7
Sales	10.8	14.3
Services	43.2	31.4
Primary	8.1	7.1
Manufacturing	10.8	14.3
Construction	8.1	7.1
Transportation	2.7	2.9
Medicine & health	2.7	-

7.3.2 Part-time "Before" and "After"

The type of part-time positions held by Katimavik participants prior to and following their Katimavik experience are presented below:

Occupation	% Before	After
Techno. religious, social, artistic	11.5	27.5
Clerical	3.8	7.5
Sales	11.5	12.5
Services	38.5	32.5
Primary	3.8	5.0
Manufacturing	11.5	10.0
Construction	15.4	2.5
Medicine & health	3.8	2.5

7.4 SALARIES

The next two sections present the range in wages between former participants who were working (full time or part time) before, and those who indicated work as their major activity, since they have completed the program.

7.4.1 Full-time salaries "Before" and "After"

The full-time hourly wage rates for Katimavik participants before and after participating in the Kativavik Program are presented below:

Wage/hr	% Before	% After
$5 or less	77.0	61.0
$5 to $7	19.0	29.0
$7 to $10	4.0	8.0
$10 or more	-	2.0

These results indicate that Katimavik particpants who are working full-time, on the whole, have improved their hourly wage rates somewhat since particpating in the Katimavik Program. Whereas only 23% of the participants received better than minimum wage before Katimavik, 39% are presently receiving better than minimum wage.

7.4.2 Part-time Salaries "Before" and "After"

The part-time hourly wage rates for Katimavik participants before and after participating in the Katimavik Program are presented below:

Wage/hr.	%	
	Before	After
$5 or less	71.0	57.5
$5 to $7	29.0	33.5
$7 to $10	-	9.0

Once again, as can be seen by the above results, Katimavik participants working part-time have experienced, on the whole, an increase in their hourly wage rates. Where only 29% of participants working part-time before entering the Katimavik program were earning more than $5.00/hr, or better than minimum wage, 42.5% of the participants are presently earning better than minimum wage.

7.5 WAGE-RELATED IMPACTS OF KATIMAVIK ON FORMER PARTICIPANTS

7.5.1 Full-time work

If we take the difference between the average hourly wage rate of the participants presently working full-time and the average hourly wage rate of the participants who were working full-time before they entered the Katimavik Program and adjusted for one year of inflation;

average wage/hr after: $5.19

-

average wage/hr before: $4.80 (adjusted for 4.4%

$0.39 inflation);

the average full-time work hourly increase is then 39 cents per hour.

If we apply the 39 cents to the average number of hours worked per week, which is 38.8 hrs., the average weekly increase is approximately $15.00 or $780.00 per year (52 weeks) per participant. This corresponds to the net impact of all factors influencing the former participant's wage rate; Katimavik represents one of the several possible influencing factors. In section 7.5.3, the Katimavik influence on the type of jobs and thus on the salary earned, will be presented.

7.5.2 Part-time work

Making the same calculation as the above for Katimavik participants working part-time before and after their Katimavik participation;

average wage/hr after: $5.16
-
average wage/hr before: $4.83 (adjusted for 4.4%
$0.33 inflation);

The average part-time work hourly increase is then 33 cents per hour. If we apply the 33 cents to the average number of hours worked per week, which is 24, the average weekly increase in aaproximately $7.92 per participant. As it was mentioned in the previous section, Katimavik is only one of several possible factors influencing the level of salary. The next section will assess the weight of the Katimavik influence.

7.5.3 Katimavik Influence

We asked the participants to evaluate the degree of influence the Katimavik Program had on the type of job they were in and to what extent was their Katimavik training (work experience) related to those skills required in their present job. The results are as follow:

Influence on type of job	%
Very significant influence	21.7
Somewhat significant influence	22.9
Somewhat insignificant	15.7
Very insignificant influence	39.7

Relationship between Katimavik and skills	%
Very related	12.2
Somewhat related	36.6
Somewhat unrelated	9.8
Very unrelated	41.4

Given these results, we are unable to state that the hourly wage increase calculated in 4.5.1 and 4.5.2 above are related (direct impacts) to the participants' Katimavik experience, as approx. 50% repsonded that Katimavik had an influence on their job and skills required, while 50% indicated very little or no influence.

In order to evaluate the influence of Katimavik on the hourly wage rate, a cross-tabulation was performed between results from the influence of Katimavik and the wage rates of former participants who are working. This applied to 83 participants and results from this analysis appear in Table 8.0.

TABLE 8.0
CROSS-TABULATION - INFLUENCE OF KATIMAVIK ON TYPE OF JOB HOURLY WAGE AFTER KATIMAVIK

HOURLY WAGE AFTER KATIMAVIK	$0 to $5	$5 TO $7	$7 TO $10	$10	ROW TOTAL
Influence of Katimavik					
1 Very significant influence	7	6	5		18 21.7
2 Somewhat significant influence	11	7		1	19 22.9
3 Somewhat insignificant influence	9	4			13 15.7
4 Very insignificant influence	22	9	1	1	33 39.8
COLUMN TOTAL	49 59.0	26 31.3	6 7.2	2 2.4	83 100.0

The main conclusions to be drawn are:

1) Most participants earning $5 and hour and less (63.3%) find that Katimavik had an insignificant influence on their type of jobs.

2) 50% of the participants earning between $5 and $7 an hour find that Katimavik had an influence on their type of jobs.

3) 5 participants out of 6 earning between $7 an hour and $10 an hour find that Katimavik had a very significant influence on their type of jobs.

4) Only two participants earned $10 and hour, and there is a split between significant influence and insignificant influence.

In terms of statistical significance, both variables are independant from each other because of their low chi-square (17.25). This means there is little statistical relation between those two variables. This conclusion is also proven by the low value of the Lambda statistics, which is close to 5%. This means, it is very difficult to predict the influence of Katimavik on jobs from the salary scale of the participants.

The same results and conclusions could be drawn from the cross-tabulation between "relation of Katimavik on working skills" and the hourly wage rate of former participants after Katimavik.

7.6 SCHOOL-RELATED IMPACTS OF KATIMAVIK ON FORMER PARTICIPANTS

The impacts evaluated in this section are qualitative impacts. These impacts correspond to Katimavik influence on the choice to return to school of former participants. Results of those impacts are presented in section 4.6.3, following the discussion of the observations on full time and part time school, before and after Katimavik.

7.6.1 Full-time school

There are presently 55 participants attending school on a full-time basis compared to 112 particpants that were attending school on a full-time basis prior to entering the Katimavik Program.

The breakdown in terms of educational level for those participants attending school on a full-time basis "before" and "after" Katimavik is as follows:

Education level	% Before	% After
High School	56.0	9.0
Trade School	3.0	14.5
College (1st year)	24.0	51.0
College (2nd year)	4.0	14.5
College (3rd year)	3.0	-
University (1st year)	10.0	11.0
University (2nd year)	1.0	7.0

7.6 PARTICIPANT DEVELOPMENT

Many of the impacts of the Katimavik Program on the participants are unquantifiable since they relate to the personal development of the participant. In order to identify and measure these impacts, the interviewed participants were asked to respond to a series of questions relating to a variety of work/study qualities or attitudinal characteristics including : leadership and initiative ; responsibility and tenacity ; ponctuality ; and work sociability.

The participants were asked to evaluate themselves on each question for both "after" and "before" their Katimavik experience. Their evaluation was based on a range of responses : "most of the time" (1) ; "frequently" (2) ; "sometimes" (3) ; and "rarely" (4). These responses were given a value from 1 to 4, as indicated above, with 1 representing the most positive value and 4 the most negative value. When the "after" and "before" responses to a question were compared we were able to measure the degree of change, as well as whether the change was positive or negative.

The result of these questions are presented below by work/study quality :

Leadership & Initiative :

44 % of the participants perceived no change.

42 % perceived a positive change	23 % perceived 1° + change
	14 % " 2° + change
	5 % " 3° + change

14% perceived a negative change	8,0% perceived 1° - change
	5,5% " 2° - change
	0,5% " 3° - change

Therefore, with respect to "leadership and initiative", where change was perceived, participants significantly more often perceived a positive rather than negative change.

Responsability & Tenacity :

48% of the participants perceived no change.

35% perceived a positive change	18% perceived 1° + change
	12% " 2° + change
	5% " 3° + change

17% perceived a negative change	10% perceived 1° - change
	4% " 2° - change
	3% " 3° - change

With respect to "responsibility and tenacity" slightly less of the participants (7%) perceived a positive change, while more perceived no change and 2% more perceive a negative change than in "leadership and initiative".

Sociability, Team Work & Work Behavior :

51% of the participants perceived no change.

41,5% perceived a positive change	27,5% perceived 1° + change
	9% " 2° + change
	5% " 3° + change

7,5 % perceived a negative change	5,0 % perceived 1° - change
	1,5 % " 2° - change
	1,0 % " 3° - change

In terms of "sociability, team work and general work behavior", again, fewer participants perceived a change than in the other work quality categories, and fewer perceived a negative change.

Ponctuality:

70 % of the participants perceived no change.

24 % perceived a positive change	9 % perceived 1° + change
	7 % " 2° + change
	8 % " 3° + change

17 % perceived a negative change	5 % perceived 1° - change
	0 % " 2° - change
	1 % " 3° - change

The majority of the participants perceived no change with respect to "ponctuality" at work or at school. Of those that perceived a change, fewer perceived a negative change than in the other work quality categories.

PART III TOTAL IMPACT OF KATIMAVIK ON THE CANADIAN ECONOMY

In this section, a "formula" or method had to be developed to estimate the value of the programs' outputs from the inputs. In order to perform this task, we used the input-output model for the Canadian economy that is a service offered by Statistics Canada. An explanation of how the data was prepared for Statistics Canada, how the results were presented to us and finally what is the magnitude of impact on the Canadian economy is presented below.

8.0 DATA PRESENTATION

The Katimavik program costs and the sponsors costs were used by Statistics Canada to evaluate the effects of Katimavik on the Canadian economy.

The Katimavik cost breakdown by type of expenses for year 7 were provided to us by the Katimavik Accounting Department. These costs were then transferred onto the Statistics Canada list of commoditie. The costs totalled 20 896 532 $ for the five regions.

The sponsors costs were available through information files on the projects, for which the sponsors were interviewed. Costs incurred for those 49 projects were tabulated by work category and type of expenditures. The second step, consisted in transferring those expenses onto Statistics Canada list of commodities.

The proportion between the total amount of sponsor costs for all projects in year 7, and, the total amount of expenses incurred for the 49 projects examined, was applied to the commodities. This step was performed in order to determine the total amount spent by sponsors on each commodity in year 7 (this projection is possible, only if all commodities are spent in the same manner in each work category).

These results were then redistributed by region depending on the relative importance of sponsors costs in each region (sponsors costs per region were taken from "phase 1.0" data).

9.0 PRESENTATION OF RESULTS

The information Statistics Canada provides, following a simulation, is :

1. The reorganization of results by province and by industry ;
2. The generated production figures by industry and province ;
3. The generated jobs by industry an province, and ;
4. Information on flows of exchange between provinces and the balance of expenditures and revenues by province.

All of the tables sent back by Statistics Canada are for both Katimavik costs and sponsor costs, separately.

The most important information is that concerning generated production and jobs by province.

10.0 THE MAGNITUDE OF RESULTS

Three tables have been prepared in order to draw conclusions from the results for both simulations ; the first two concern generated gross-production, the last one, generated jobs, because of Katimavik.

In Table 11.0, the Katimavik and sponsor expenditures represent the actual costs established in the data preparation section. As a result of those expenditures, an estimated impact is derived for the Katimavik program and sponsors, separately. Both impacts have then been added together for each province and region.

The total production generated because of Katimavik and sponsor expenditures is 73 880 646 $ for the five Canadian regions. The Canadian multiplier is 2.43. That means 1,00 $ spent by Katimavik and the participating sponsors generates 2,43 $ of production in the Canadian economy.

In order to see regional differences in the way the upstream impact are distributed within a province, the simulations were done on the inter-provincial input-output model. This model takes into account the industrial characteristics of the Canadian provinces and territories. Because there exists differences between provinces in their industrial characteristics, it is reasonable to derive different multiplier effects within each province.

The multiplier effects by region are as follows :

Atlantic : 1,68
Quebec : 2,17
Ontario : 3,32
Prairies : 2,70
Pacific : 1,93

A comparison of these multipliers with actual ones registered in the economy is presented below:

Industrial sector	Multiplier (1)
1. Transportation	2,60
2. Agriculture	2,38
3. Leisure and Entertainment	2,50
4. Retail	2,28
5. Construction	3,29
6. Teaching & others	2,28
7. Katimavik	2,43

As one can see, the Katimavik multiplier of expenses, is very comparable to other sectors in generating effects in the economy.

Table 12.0 presents the impacts and the calculated multiplier by work category. The impacts assessed by work category, were calculated for the Katimavik program and the sponsors separately. The Katimavik program impacts were distributed depending on the number of projects present in each category. The sponsors' impacts were assessed proportionally to their expenses by work category. The total impact by work category corresponds to the sum of the Katimavik impacts and the sponsors' impacts by work category.

The multiplier corresponds to the factor by which the costs have to be multiplied, in order to equal the impacts. From Table 12.0, one can observe that all of the work categories multipliers are very close to the averages calculated by region. The reason why the multipliers are close to their averages by region is because the Katimavik program spending, which, by assumption, is the same for each project, is proportionately more important than sponsor spending.

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(1) Those multipliers represent gross domestic product multipliers and were provided by the input-output model department of Statistics Canada.

Table 13.0 presents jobs generated because of Katimavik by region. In this table, one has to subtract the number of persons who were working for Katimavik in year 7. Therefore the 997 jobs generated by Katimavik have to be reduced by 490 persons (average) on Katimavik payroll in year 7. The "real" number of generated jobs is 507. It was impossible to work with the number of persons working for Katimavik by region, but if we distribute the number of "real" jobs generated by Katimavik, according to the same proportion as the breakdown in table 13.0 we find the following :

REGION	JOBS CREATED BY KATIMAVIK OTHER THAN THOSE ON THE KATIMAVIK PAYROLL
Atlantic	81
Quebec	147
Ontario	165
Prairies	80
Pacific	54

TABLE 11.0 - GROSS PRODUCTION GENERATED BY THE KATIMAVIK PROGRAM AND THE PROJECT SPONSORS

PROVINCE	KATIMAVIK EXPENDITURES	SPONSOR EXPENDITURES	KATIMAVIK IMPACT	SPONSOR IMPACT	TOTAL IMPACT	TOTAL IMPACT BY KATIMAVIK REGION
Newfoundland	771 375	196 916	1 239 912	310 850	1 550 762	**ATLANTIC** 7 256 841
Prince Edward Island	151 143	56 609	330 986	101 533	432 519	
Nova Scotia	1 352 922	362 440	2 275 394	661 837	2 937 231	
New Brunswick	1 116 383	314 098	1 795 744	540 585	2 336 329	
QUEBEC	6 133 035	3 601 833	14 083 734	7 044 781	21 128 415	**QUEBEC** 21 128 415
ONTARIO	4 891 012	2 338 280	16 403 051	7 586 802	23 989 853	**ONTARIO** 23 989 853
MANITOBA	916 511	357 957	2 258 348	746 767	3 005 115	**PRAIRIES** 14 095 315
SASKATCHEWAN	631 008	255 163	1 750 766	567 892	2 318 658	
ALBERTA	2 070 600	997 716	6 289 809	2 481 733	8 771 542	
British Colombia	2 862 541	971 457	5 230 477	2 110 619	7 341 096	**PACIFIC** 7 410 222
Yukon & N.W.T.			55 699	13 427	69 126	
CANADA	20 896 530	9 448 469	51 713 820	22 166 826	73 880 646	73 880 646

TABLE 12.0 IMPACT BY WORK CATEGORY AND REGION (1)(2)

WORK CATEGORY	ATLANTIC	QUEBEC	ONTARIO	PRAIRIES	PACIFIC
	IMPACT	IMPACT	IMPACT	IMPACT	IMPACT
1.0 CONSTRUCTION WORK MULTIPLIER	**1.70**	**2.12**	**3.28**	**2.69**	**2.00**
1.1 Building	1,563,621	3,259,688	797,904	851,445	1,284,842
1.2 Renovations	314,442	3,100,946	1,600,117	1,889,522	508,687
1.3 General light building maintenance and repairs	0	1,045,547	251,911	1,068,779	264,308
1.4 Energy conservation work	2,180	733,731	0	0	0
SUB TOTAL 1.0	1,880,243	8,139,912	2,649,932	3,809,746	2,057,837
2.0 SOCIAL SERVICE ACTIVITIES NON PHYSICAL WORK MULTIPLIER	**1.67**	**2.26**	**3.34**	**2.75**	**N.C.**
2.1 General hospital work	0	335,327	951,918	536,082	
2.2 General work with the elderly, the handicapped and the disadvantaged	528,800	1,423,401	1,871,071	851,338	74,437
2.3 Referral services	0	0	0	343,297	0
2.4 Research work, clerical work	496,715	365,426	48,789	379,566	5,866
2.5 Library work	0	340,862	1,442,965	343,297	0
2.6 All other non-physical work	311,968	470,635	2,234,480	1,299,803	93,634
SUB TOTAL 2.0	1,337,483	2,935,651	6,549,223	3,753,383	173,937

WORK CATEGORY	ATLANTIC	QUEBEC	ONTARIO	PRAIRIES	PACIFIC
	IMPACT	IMPACT	IMPACT	IMPACT	IMPACT
3.0 PARKS, RECREATION AND CIVIC DEVELOPMENT MULTIPLIER	1.67	2.16	3.31	2.66	1.88
3.1 Trail clearing, ski trails, sidewalks, access road/ramps	304,766	403,930	3,073,693	370,577	543,497
3.2 Habitat/campground improvements and development	1,353,908	3,549,549	3,438,229	2,508,517	1,704,139
3.3 River and stream cleaning	245,305	348,934	0	0	582,184
3.4 General clean up and maintenance	769,746	134,082	146,429	582,812	633,513
3.5 Surveying	0	0	0	343,297	0
3.6 Tourism development/information	0	1,524,679	1,380,903	715,111	535,503
3.7 General work in a municipality	32,730	1,979,338	1,747,857	1,200,054	0
SUB TOTAL 3.0	2,706,455	7,940,512	9,787,111	5,720,368	3,998,836

WORK CATEGORY	ATLANTIC	QUEBEC	ONTARIO	PRAIRIES	PACIFIC
	IMPACT	IMPACT	IMPACT	IMPACT	IMPACT
4.0 SILVICULTURE MULTIPLIER	1.72	2.32	3.34	2.75	N.C.
4.1 Tree planting	735,918	335,327	468,658	0	0
4.2 General nursery work to 4.5					
4.2	255,741	802	937,317	343,297	0
4.3	19,303	0	55,411	0	0
4.4	50,075	0	175,306	68,736	23,723
4.5	0	4,430	0	0	0
SUB TOTAL 4.0	1,041,037	340,559	1,636,692	412,033	23,723
5.0 ARCHEOLOGICAL WORK MULTIPLIER	1.67	N.C.	3.32	N.C.	1.93
5.1 Archeological field work	0	0	0	0	0
5.2 Restoration work	0	0	468,658	0	264,308
5.3 Research, laboratory work	0	0	468,658	0	83,085
5.4 Work at museum or historical site	269,996	7,290	1,911,432	11,807	747,261
SUB TOTAL 5.0	269,996	7,290	2,848,748	11,807	1,094,654

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WORK CATEGORY	ATLANTIC	QUEBEC	ONTARIO	PRAIRIES	PACIFIC
	IMPACT	IMPACT	IMPACT	IMPACT	IMPACT
6.0 MISCELLANEOUS MULTIPLIER	N.C.	2.28	3.34	2.78	N.C.
6.1 Work in cemetery	0	340,021	0	0	0
6.2 Recycling	0	690,723	0	0	61,220
6.3 General clerical work (non social)	1,447	2,953	518,138	387,970	0
6.4 Physical work for the parish/church	174	730,657	0	0	0
SUB TOTAL 6.0	1,621	1,764,354	518,138	387,970	61,220
TOTAL	7,256,835	21,128,278	23,989,844	14,095,307	7,410,207

(1) Sligh differences might appear between table 11 and 12. These differences are due to rounding of total impacts.

(2) Relative importance was determined by number of hours worked.

N.C.: Not calculated.

TABLE 13.0 - JOBS GENERATED BECAUSE OF KATIMAVIK
(including Katimavik employees)

KATIMAVIK REGION	PROVINCE	JOBS BY PROVINCE	JOBS CREATED BY KATIMAVIK REGION
ATLANTIC	Newfoundland	26	120
	Prince Edward Island	7	
	Nova Scotia	48	
	New Brunswick	39	
QUEBEC	Quebec	290	290
ONTARIO	Ontario	324	324
PRAIRIES	Manitoba	45	157
	Saskatchewan	25	
	Alberta	87	
PACIFIC	British Columbia	105	106
	Yukon & N.W.T.	1.0	
CANADA	Canada	997	997

CONCLUSIONS

CONCLUSIONS

The major objectives which had to be met in this report are as follows:

1) a verification of the actual work performed evaluation carried out in Phase 1.0;

2) an evaluation of the sponsor's willingness to pay for participant services;

3) an evaluation of the sponsor's appreciation of the Katimavik participants;

4) an evaluation of the economic and social benefits of the program in the communities where projects have been realized;

5) an evaluation of the economic and social benefits of the program on participant's development;

6) the global impact of the expenditures made by the Katimavik program and its sponsors on the Canadian economy;

In order to realize these objectives, a survey was conducted with sponsors and former participants of year 7. The survey was used mainly to evaluate the first five objectives.

In addition to the survey, the input-output model of Statistics Canada was used to assess the impacts of the program and its sponsors.

The main conclusions to be drawn from this study are:

1) the true value of labor calculated from sponsor comments on their willingness to pay the participants is evaluated at $13,516,067; this figure shows that the estimated value of the work performed in phase 1, which was evaluated at $12,505,909, was accurate;

2) the overall sponsor appreciation of Katimavik participants was very positive as indicated by the sponsors in the questions relating to their appreciation of the participants;

3) 57% of the sponsors would have been unable to proceed with their projects without Katimavik;

4) Katimavik involvement saved sponsors close to $23,000, on average, per project. Total savings were $14,365,569 for the 321 projects carried out in year 7;

5) since they have completed their Katimavik experience,

    i) more former participants are working;
    ii) less former participants are studying;
    iii) slightly more former participants are unemployed;
    iv) the former participants are earning an average of $0.39 more per hour (without inflation), for full time jobs;
    v) the former participants working part-time are earning $0.33 more per hour (without inflation).

6) Influence of Katimavik on participants' jobs and on their return to school has not been statistically proven.

7) The relationship between Katimavik apprenticeship and working skills also could not be statistically proven for former participants. The same conclusions can be drawn for the relationship between Katimavik apprenticeship and topic of study of the former participants who returned to school after Katimavik participation.

8) Former participants noticed a positive and significant change in their work/study behavior having completed Katimavik.